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The IRAS Minor Planet Survey

PHILLIPS LABORATORY
Directorate of Geophysics
AIR FORCE MATERIEL COMMAND
HANSCOM AIR FORCE BASE, MA 01731-3010

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PL-TR-92-2049

The IRAS Minor Planet Survey

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Final Report

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PHILLIPS LABORATORY
Directorate of Geophysics
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13. ABSTRACT *(Maximum 200 words)*
This report documents the program and data used to identify known asteroids observed by the Infrared Astronomical Satellite (IRAS) and to compute albedos and diameters from their IRAS fluxes. It also presents listings of the results obtained. These results supplant those in the *IRAS Asteroid and Comet Survey, 1986.* The present version used new and improved asteroid orbital elements for 4,679 numbered asteroids and 2,632 additional asteroids for which at least two-opposition elements were available as of mid-1991. It employed asteroid absolute magnitudes on the International Astronomical Union system adopted in 1991. In addition, the code was modified to: 1) increase the reliability of associating asteroids with IRAS sources, and 2) rectify several shortcomings in the final data products released in 1986. Association reliability was improved by decreasing the position difference between an IRAS source and a predicted asteroid position required for an association. The shortcomings addressed included the problem of flux overestimation for low SNR sources, and the systematic difference in albedos and diameters among the three wavelength bands (12, 25, and 60 μm). Several minor bugs in the original code were also corrected. Machine-readable versions of the input and output data products are available from the National Space Science Data Center at the NASA Goddard Space Flight Center.

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PREFACE

This book contains the documentation for the *IRAS Minor Planet Survey* (IMPS). It explicates the creation and formats of the final data products and contains all of the hard copy catalogs. Although the reader is often referred to the *IRAS Explanatory Supplement* (1988) for arcane details of the IRAS hardware, inertial source survey strategy, or SDAS data processing technicalities, and to the *IRAS Asteroid and Comet Survey (1986)* for information regarding the previous processing of IRAS asteroid data, this document alone should satisfy the needs of most users of IRAS asteroid data.

Because of substantial changes between the first processing of the IRAS asteroid data and the current version it was necessary to produce a different set of final data products and to completely rewrite the documentation. This version describes the data submitted to the National Space Science Data Center (NSSDC); interested readers are referred to the NSSDC for access to the IMPS data. See §1.3, page 3 for instructions on how to do this.

The final version of this document was written in WordPerfect for Windows (Ver. 5.2) and printed on a Hewlett-Packard LaserJet Series II printer. Except for the figures appearing in Chapters 5, 6, and 7, all figures are contained in the WordPerfect file. Figures were generated using Plot 88 (for those in Chapters 5, 6, and 7) and using Axum (Ver. 3.0), Microsoft Excel for Windows (Ver. 4.0), and Corel Draw (Ver. 3.0) for the remainder.

E.F. Tedesco
Nashua
December 1992

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Part I: Description

Chapter 1

INTRODUCTION

Edward F. Tedesco

This chapter presents the organization of the* IRAS Minor Planet Survey Catalog *and introduces the reader to its use. It tells how to obtain machine-readable versions of the data and describes how this material should be referenced.

The primary purpose of the Infrared Astronomical Satellite (IRAS) was to survey the sky in four wavelength bands centered near 12, 25, 60 and 100 μm. The satellite was launched in January 1983 and obtained observations until November 1983. In this period it surveyed approximately 96 percent of the sky. The IRAS mission, data processing and data products are described in *Infrared Astronomical Satellite (IRAS) Catalogs and Atlases Volume 1 Explanatory Supplement* (1988, C.A. Beichman, G. Neugebauer, H.J. Habing, P.E. Clegg, and T.J. Chester, eds.), hereinafter referred to simply as the *ES*. It is available as NASA publication No. RP-1190.

The IRAS data are available in several catalogs, organized primarily according to the angular size of the source. As of January 1992 there were seven data products which deal with regions of the sky in areas ranging from 2 arcminutes by 0.5° to 16.7° by 16.7°. Those with data on discrete sources include the *Point Source Catalog, Faint Source Catalog, Small Scale Structure Catalog, Serendipitous Survey Catalog, Cataloged Galaxies and Quasars, Catalog of IRAS Observations of Large Galaxies,* and the *Low Resolution Spectrometer (LRS) Catalog*. These catalogs all deal with sources which are fixed on the sky. The *IRAS Asteroid and Comet Survey, 1986* provided observations for moving sources, the asteroids and comets.

The present document describes the creation of the second IRAS catalog for moving sources, the *IRAS Minor Planet Survey* (IMPS). It is divided into three parts: Part I presents an overview of the IRAS asteroid task and documents the data and algorithms used to identify, extract, and process asteroid detections to yield albedos and diameters, Part II presents catalogs of useful data derived from the IRAS infrared

fluxes, Part III contains appendices of acknowledgements, references, and a list of acronyms and glossary of terms used in the IRAS Project and throughout this document. Part III is followed by an Index.

1.1 The IRAS Minor Planet Survey

In contrast with the *IRAS Asteroid and Comet Survey (1986)*, IMPS processed only IRAS survey observations of asteroids; comets were not processed. Low Resolution Spectrometer, Serendipitous Observations, and Additional Observations data were not processed. IMPS did process all asteroids with reasonably-well-known orbits as of December 1990. In particular, IMPS updates the processing of asteroids numbered 1 through 3318 and extends this processing to asteroid number 4679 plus 2,632 asteroids with preliminary (two or more opposition) orbits.

Note that, as with the *IRAS Asteroid and Comet Survey (1986)*, the IMPS catalogs and databases are fundamentally different from those catalogs and databases produced for fixed sources. Asteroids move and their apparent emission levels can vary by large amounts. Consequently different methods and criteria were used for processing potential asteroid sightings. It is the purpose of this documentation to describe those differences.

1.2 The IRAS Minor Planet Survey Catalog

This document constitutes the *IRAS Minor Planet Survey (1992)*. Part I begins with this introduction, presents a history of the IRAS asteroid task (Chapter 2), documents the ground-based asteroid data used in identifying asteroids and in deducing albedos and diameters from their IRAS-measured infrared fluxes (Chapter 3), describes how asteroid sightings were identified and processed (Chapter 4), presents analyses of the asteroid associations (Chapter 5) and accepted sightings (Chapter 6), an overview of the results obtained (Chapter 7), and concludes with a summary chapter (Chapter 8) which discusses the completeness and reliability of the survey, the statistical adjustments made to the derived results, and details the major differences between this catalog and the *IRAS Asteroid and Comet Survey (1986)*.

Part II describes the IMPS data products and presents all of the *IRAS Minor Planet Survey* catalogs, *i.e.,* all of the printed data products. It contains technical details about the data, including data formats. Chapter 9 presents a general description of the final data products, Chapter 10 gives the formats of the data bases and catalogs, Chapter 11 presents a subset of the ground-based data used (the corresponding data base contains all the ground-based data used), Chapter 12 presents albedos and diameters derived for all asteroids with multiple sightings, while Chapter 13 presents

these same data for those asteroids with only a single IRAS sighting at one wavelength. Chapte : 14, 15, and 16 present details on detection statistics, rejected sightings, and missed-predictions, respectively.

Part III consists of four appendices: Acknowledgements (Appendix 1), all references used throughout this volume (Appendix 2), a table of acronyms and glossary of terms (Appendix 3), and the IRAS flux look-up table (Appendix 4).

1.3 Final Data Products

We refer to the printed data products as "catalogs" and to the machine-readable products as "data bases". All of the catalogs appear in this document; the machine-readable data bases are available from the National Space Science Data Center (NSSDC) at the Goddard Space Flight Center under the name *The IRAS Minor Planet Survey Catalog and Data Base*, 1992. The machine-readable data may be obtained from the National Space Science Data Center by sending an electronic mail message to REQUEST@NSSDCA.GSFC.NASA.GOV (Internet) or to NSSDCA::REQUEST (NSI-DECnet). Arrangements to obtain them may also be made via telephone at (301) 286-6695 or by writing to: NSSDC Coordinated Request and User Support Office, NASA/Goddard Space Flight Center, Code 633.4, Greenbelt, MD 20771 U.S.A.

The IMPS Data Base includes machine-readable versions of all catalogs published herein. In addition, a number of products too large to include as printed catalogs are available only in machine-readable form, *viz.*, the osculating orbital elements and the IMPS Sightings Data Base.

1.4 Referencing IRAS Minor Planet Survey Material

The following guidelines for referencing IRAS Minor Planet Survey material are modeled after those employed in referencing non-asteroid IRAS publications and data products as detailed in IPAC Newsletter Vol. 2, No. 2 (June 1986). In general references to an authored chapter follow the same procedures as used when referencing a chapter in a book. The method for referencing the machine-readable data products is given below.

When referencing the IRAS Minor Planet Survey in general use: "(The IRAS Minor Planet Survey, 1992)" in the text and "*IRAS Minor Planet Survey, 1992*, edited by Tedesco, E.F. (Phillips Laboratory Technical Report No. PL-TR-92-2049. Hanscom Air Force Base, MA.)" in the references.

For reference to an authored chapter in the bound document (The IRAS Minor Planet Survey, 1992) use the same method as used for a chapter in a book. For example, in the text use "(Veeder and Tedesco, 1992)," and in the references: "Veeder, G.J. and Tedesco, E.F. (1992). IRAS minor planet survey asteroid associations. In *Infrared Astronomical Satellite Minor Planet Survey Catalog*, 1992 (E.F. Tedesco, ed.), pp. 45 – 80. Phillips Laboratory Technical Report No. PL-TR-92-2049. Hanscom Air Force Base, MA."

For reference to machine-readable IRAS Minor Planet Survey data, at the appropriate place in the text use "Tedesco, *et al.* (1992)", and in the references: "Tedesco, E.F., Veeder, G.J., Fowler, J.W., and Chillemi, J.R (1992). The IRAS Minor Planet Survey Data Base, National Space Science Data Center, Greenbelt, Maryland."

Note that the hard-copy document is only available from Dr. Stephan Price, Phillips Laboratory, Geophysical Directorate, Backgrounds Branch/GPOB, Hanscom Air Force Base, MA 01731-3010 (Internet: price@dirac.plh.af.mil). Furthermore, the only supported version of the machine-readable data base is that at the NSSDC.

Chapter 2

HISTORY

Dennis L. Matson and Edward F. Tedesco

This chapter presents the history of the all-sky, infrared, survey of asteroids and comets conducted by the Infrared Astronomical Satellite. It describes the* raison d'etre *for the IRAS Minor Planet Survey Catalog and presents the background within which the asteroid portion of the IRAS mission was performed.

The IRAS Asteroid and Comet Survey was the largest, most uniform and least-biased survey ever conducted for asteroids and comets. The size and approach of this survey gave it marked advantages over earlier surveys. Some ninety-six percent of the sky was scanned, providing a large number of asteroids/comets and an excellent sampling of their spatial distributions. The instrument and survey parameters were relatively constant throughout, thanks to the space environment, yielding a uniform set of data. This was the first survey to observe thermal emission and thereby it avoided the severe albedo bias present in visual surveys. As an example of how severe this bias can be, consider two otherwise equal asteroids, one with (bolometric Bond) albedo 0.03 and the other with albedo 0.2. The flux of reflected sunlight differs between them by a factor of almost seven. But, the total radiated infrared flux differs by only a factor of about 1.2!

2.1 The IRAS Asteroid Task

Well before the flight of IRAS it was known that some relatively minor changes and augmentations to the Science Data Analysis Subsystem (SDAS) would enable moving sources to be recognized and their data set aside for later processing with software specialized and tuned for the analysis of asteroid and comet data. Before these steps were authorized by NASA, however, the Project was directed to assess the scientific worth of such processing and to exhibit a plan for its implementation. Thus were initiated a series of planning activities which developed the worth, philosophy and much of the detailed approach and implementation used by the Asteroid Task. To understand what was done and why it was done that way in the Asteroid Task, we must start with the legacy which the IRAS Asteroid Task received.

2.2 Planning Activities

Serious thinking about the possibility of an IRAS asteroid survey occurred as early as 1976. In the spring of that year there were a number of informal conversations in Pasadena. By late summer, the subject was widely discussed at IAU Colloquium No. 39 (*Relationships between Comets, Minor Planets, and Meteorites*) held in Lyon, France. It was realized that such a survey could easily be the most important asteroid survey ever and might contribute crucial information to understanding the relationships among asteroids, comets, and meteorites.

Four years later, late into the afternoon and evening of April 8, 1980, experts from the United States, the United Kingdom, and the Netherlands converged upon Pacific Grove, a small town near Monterey, California. There at the Asilomar Conference Grounds, many of them met each other for the first time. They were there for a three day workshop on "IRAS and the Asteroids" which was convened by the IRAS Project at the request of NASA. The workshop was co-chaired by Dennis L. Matson of the Jet Propulsion Laboratory and Russell G. Walker of the NASA Ames Research Center. The Workshop was notable because the organizers conducted an extensive and thorough search for the collective expertise needed to assess the significance of the asteroid observations to be made by the Infrared Astronomical Satellite (IRAS). Would the observations be "worthwhile"? Could the asteroid data be identified and separated from the data stream? Could it be done at reasonable cost and in the time available? Would coordinated observations from telescopes on the ground contribute to the overall value of the results?

During the Workshop, the participants intensively educated and questioned each other. They thought and argued. Most remarkable of all, they came to a consensus. From that point on it was just a matter of preparing written reports and hammering out the final wording of the recommendations. These reports and recommendations were assembled into a document entitled *The Infrared Astronomical Satellite (IRAS) and the Asteroids* by William Wells, Science Applications, Inc. but never formally published.

It was at this fruitful workshop that the IRAS Asteroid Task was assessed from both scientific and practical points of view and at which the detailed planning for the setting up of the IRAS Asteroid Survey was initiated. Then the planning function for the Asteroid Survey was assumed by the Project. An Asteroid Advisory Group (AAG) was created at JPL as an element of the Project and a series of Asteroid Workshops was initiated to help by providing technical advice and an independent review for work completed. The attention of these planning activities was focused on the processing of the data at the Science Data Analysis Subsystem (SDAS) at JPL.

In the same time frame, an entirely independent planning activity was in progress in the United Kingdom. This effort was headed by Professor A. J. Meadows and his group at the University of Leicester. They had independently recognized the value of the IRAS asteroid and comet observations. In the U.K. attention was focused on the unique opportunity afforded at the Preliminary Analysis Facility (PAF), located at the Appleton Laboratory in Chilton. Here it might be possible to discover fast moving (*i.e.*, near- Earth) asteroids and new comets in near real-time. Such rather immediate discovery would permit additional observations of the new object to be made before its apparition was over. While the two planning activities were independent, coordination and a free flow of information was maintained.

2.3 Preliminary Analysis Facility (PAF) Fast-Moving Object Search

The IRAS Ground Operations (IGO) and the Preliminary Analysis Facility (PAF) were the key mission elements that were provided by the United Kingdom. IGO consisted of a tracking station, a control center and the computers and associated software needed for these functions. The PAF fulfilled the role of keeping constant watch on the quality of the data returned by IRAS. It was designed to monitor the satellite data in near real-time and to chart the progress of the survey. Accordingly, and due to the large volume of data collected, the analyses made at PAF were rapid and provisional in nature.

Descriptions of the PAF fast-moving object search are now available in the literature (*i.e.*, Davies *et al.*, 1984; Stewart *et al.*, 1984; Green *et al.*, 1985).

2.4 The IRAS Science Data Analysis Subsystem (SDAS)

The work at SDAS focused on developing ways to recognize the asteroid and comet data and to collect it for analysis and reduction later. Thus, a potential asteroid/comet extractor was designed and added to the existing software. It monitored the SDAS data stream for sources that met "asteroid/comet" criteria and wrote them and their identifying parameters to a pair of files called CN28 and CN29. These files became the input for later processing by specialized "asteroid/comet" software.

2.5 The IRAS Asteroid Data Analysis Subsystem (ADAS)

The Asteroid Data Analysis Subsystem (ADAS) was the heart of the asteroid/comet data reduction. It was a set of specialized software used to preview and process the data and produce the final data products. A detailed description of its creation, operation, and the results it produced appear in the *IRAS Asteroid and Comet Survey* (1986).

2.6 The IRAS Asteroid Advisory Group (AAG)

In October 1982, three months before launch, the IRAS Project approved the creation of an "Asteroid Advisory Group" whose charter was to assist the Project in the extraction of sightings of asteroids and comets from the IRAS data stream and derivation of useful physical information from the observed fluxes. The AAG was involved on a daily basis in the development of ADAS and that development was also the prime subject at most of the periodic Asteroid Workshops. The Workshops were formed for a review by and representation of the interests of the asteroid and comet science communities. From a Project point of view they played two roles. First, they provided overall scientific advice and technical assistance in handling some of the more difficult problems encountered in specifying the data processing. Of particular importance was the help rendered in defining and evaluating various trade-offs, especially these involving how to most effectively employ the available resources to maximize scientific value of the data products. Second, they served as an external review board by evaluating the progress made and the products produced.

In 1984 there was a shortfall in overall NASA Project funding and the Asteroid Task was prematurely terminated. After a hiatus of several months the task was restarted, at a lower level, using "borrowed" funds from the Planetary Exploration Division at NASA Headquarters. In the mean time the Asteroid Task's systems engineer and half the programming staff had left and were no longer available for the Asteroid Task. Fortunately, two of the senior programmers were reassigned to the task and it proceeded on a "best effort" basis. As a consequence of this there were insufficient resources to thoroughly test or document the asteroid data products prior to their release to the National Space Science Data Center (NSSDC). Thus the "flux overestimation" effect, for example, although recognized prior to release, went uncorrected. The existing documentation was packaged and entitled "*IRAS Asteroid and Comet Survey - Preprint Version No. 1 - October 1986*".

2.7 The Transition from ADAS to IMPS

Many useful scientific results were obtained with the 1986 version of the IRAS asteroid data base. For example, the number of asteroids with albedos and diameters was increased from about 200 to over 1,800. This led to new estimates of the size-frequency distributions of asteroids, an improvement in the standard asteroid thermal model, and the discovery of new taxonomic classes, to mention but a few. See Matson *et al.* (1989), Tedesco *et al.* (1989a,b), and Veeder *et al.* (1989b) for further details.

As good as the 1986 data products were, clearly (just as with the *IRAS Point Source Catalog*) a better product could be produced using the experience gained during production of the first data set. In the case of the asteroids, this meant searching the data stream using significantly more (and more reliable) orbital elements, incorporating improved visual absolute magnitudes, accounting for systematic effects such as flux overestimation (which affected about 40% of the observed asteroids), and the band-to-band differences in the derived albedos and diameters (which affected all of the observed asteroids), and better understanding the completeness versus reliability issue.

Also of concern was the fact that with the creation of the Infrared Processing and Analysis Center (IPAC), following the end of the IRAS Project, the IRAS data and processing code were not to be transferred from the JPL IBM 3030, upon which the mission processing had been performed, to the then new IPAC Cyber computer. This would have meant the loss of access to the asteroid processing code.

Both the NASA Astrophysics and Planetary Astronomy divisions declined to fund a transferring/reprocessing task. Fortunately, a sponsor from the Department of Defense community saw the value of undertaking this task. Thus, between 1988 and 1992, under support provided by the Air Force Geophysics Laboratory[1] with funding provided by the Strategic Defense Initiative Organization, the IRAS asteroid database and code were ported from the JPL IBM 3030 (on which it was no longer supported) to the IPAC Cyber. ADAS was recoded and improved extraction and reduction routines were devised and implemented. This phase of the project is referred to as the *IRAS Minor Planet Survey (IMPS)* to distinguish it from its progenitor, ADAS.

IMPS was one part of the Air Force Geophysics Laboratory's Celestial Backgrounds Program to characterize the global properties of the infrared sky and to create an accurate celestial scene generator. In late 1991 a total of 7,311 sets of asteroid orbital elements were processed by the IMPS software versus 3,453 sets processed in 1986 through the ADAS software.

Results for the approximately 2,000 asteroids with reliable IRAS observations are presented in this explanatory supplement. It is here where we document the history, processing, and analysis of these data. This document is available from Dr. Stephan Price, Phillips Laboratory, Geophysical Directorate, Backgrounds Branch/GPOB, Hanscom Air Force Base, MA 01731-3010 (Internet: price@dirac.plh.af.mil). The machine-readable files of the final data products, have been deposited at the NSSDC under the name *The IRAS Minor Planet Survey Catalog and Database, 1992*.

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[1]Now the Geophysical Directorate of the Phillips Laboratory

2.8 The IRAS Survey

We believe it would be prudent for users of the IMPS data to have some knowledge of how the IRAS survey was conducted. Therefore, in this section we present a brief overview of some aspects of the IRAS mission and data processing which we believe relevant to users of the IMPS data. A complete description of these matters is beyond the scope of this document, hence, the reader is frequently referred to the *ES [Infrared Astronomical Satellite (IRAS) Catalogs and Atlases Volume 1 Explanatory Supplement* 1988, C.A. Beichman, G. Neugebauer, H.J. Habing, P.E. Clegg, and T.J. Chester, eds.] and the *CGQ [Cataloged Galaxies and Quasars Observed in the IRAS Survey 1985* prepared by Lonsdale, C.J., Helou, G., Good, J.C., and Rice, W. (Jet Propulsion Laboratory)] for more detailed (and authoritative) discussion.

2.8.1 The Instrument

The focal plane of the IRAS telescope contained an array of 62 infrared detectors. Their spectral responses were centered near wavelengths of 12, 25, 60 and 100 μm. The detectors were rectangles with typical angular sizes projected onto the plane of the sky of 0.76 x 4.6 arcminutes for the 12 and 25 μm detectors, 1.5 x 4.7 arcminutes for the 60 μm detectors and 3 x 5 arcminutes for the 100 μm detectors. (*ES* §II.C.4; *ES* Fig. II.C.6). Position resolution was best in the direction in which the detectors scanned across the sky, referred to as the "in-scan" direction, and poorer in the direction perpendicular to this direction, the so-called "cross-scan" direction.

2.8.2 The Confirmation Strategy

To be included in the IRAS fixed source catalogs a source had to be confirmed on time scales of seconds, hours and weeks (*ES* §V.D. and V. E.). The layout of the focal plane was such that the image of an inertially fixed source traversed at least two detectors in each band within a few seconds. The requirement of <u>seconds-confirmation</u> rejected signals from non-astronomical sources such as energetic particle hits and fast-moving space debris. The survey strategy (*ES* §III.C) ensured that each piece of sky was scanned at least twice within a 36-hour period and usually on consecutive orbits 100 minutes apart. A source with seconds-confirmed sightings on two or more orbits within 36 hours was considered to be hours-confirmed. The final level of confirmation was obtained by rescanning the same portion of sky a few weeks later and requiring another complete hours-confirmed sighting of the source. The last two confirmation requirements eliminated moving sources from the point source catalog. All sources in the IRAS point and small extended source catalogs have been seconds, hours and weeks confirmed.

All of the data for the Asteroid and Comet Survey were required to be seconds confirmed. The moving source data were split-off from the data for other source types at the hours and weeks confirmation processing steps and saved for later reduction.

A lune scan strategy reduced excessive redundancy in scans near the ecliptic poles (*ES* §III.C.1).

2.8.3 The Survey

The IRAS mission lasted from January to November 1983 during which time 96 percent of the sky was covered with at least two hours-confirming sets of scans and 72 percent of the sky was covered with three or more hours-confirming scans (*ES* §II, §VIII.B, and §XIII). The areas completely missed are contained in two gaps on opposite sides of the sky, five degrees wide at the widest point centered on ecliptic longitudes of 160° and 340° and extending 60° above and below the ecliptic plane (*ES* Fig. I.C.1, page I-5). Many smaller gaps with a single seconds-confirming coverage, are to be found randomly across the sky (*ES* §VIII.B).

The IRAS Point Source Catalog contains 245,889 objects. The Extragalactic Catalog contains 11,444 point sources and about 1,000 small extended sources. The reliability and completeness of these data are a function of the source density and the level of coverage (*ES* §VIII.D). At high galactic latitudes, the completeness of the Point Source Catalog is estimated to be essentially unity at 60 μm above 1.5 Jy for areas of the sky with two hours-confirming scans, and above 0.6 Jy for areas that received three hours-confirming scans. Outside of confused regions the reliability exceeds 99.9 percent for sources with two or more hours-confirmed observations (*CGQ* §II.C).

2.8.4 Position and Photometric Data

"The accuracy of the position quoted ... depends on the brightest of the ... wavelengths detected. The rectangular aspect of the detectors results in a locus of positional uncertainty for a source that is roughly elliptical in shape. A comparison of Point Source Catalog positions for galaxies with well determined optical positions Dressel and Condon (1976) have shown that the absolute position errors are about 4" (in-scan) x 15" (cross-scan) for the fainter galaxies (*ES* §VII.C.I)". (*CGQ* §II.D). The absolute calibration of the IRAS observations is described extensively in *ES* §§VI.C and VII.D.

The second calibration uncertainty concerns the photometry of bright 60 and 100 μm sources. In-flight tests revealed that at 60 and 100 μm the frequency response of the detectors was not independent of the total flux falling on the detector, as has been

assumed for the data processing (*ES* §IV.A.4). For point sources brighter than about 100 Jy at 60 or 100 μm, the uncertainties in the fluxes may be as large as 30% at 60 μm and 70% at 100 μm (*ES* §VI.B.4.d). This caution applies as well to the small extended sources. This effect depends on the background as well as on the brightness of the source itself. The photometry of any source against a background greater than 10 $MJySr^{-1}$ at 60 and 100 μm is therefore suspect. (See *ES* Fig. IV.A.4 and *CGQ* §II.D). The relative photometry of the IRAS point sources is generally good with uncertainties ranging between 5 and 20% depending on the brightness of the source and the smoothness of the underlying background. (*ES* §§VI.B. and VII.D).

2.8.5 Confusion

Whether the properties of a source were properly measured by IRAS depends in large part on its isolation from other objects. Parts of the infrared sky, most notably the regions within several degrees of the Galactic Plane and the Magellanic Clouds, are highly confused at short wavelengths. At longer wavelengths, particularly 100 μm, a large fraction of the sky is affected by the highly structured diffuse emission from interstellar dust (see §2.8.6, below, on Cirrus).

At the worst, confused sources fail to satisfy the basic requirements for inclusion in the Point Source Catalog. The point source catalogs contain a number of flags which warn of possible confusion (*ES* §§VII.H, X.B and *CGQ* §IV) (from *CGQ* II.E).

Confusion was one of the more common reasons for rejecting asteroid sightings. In fact many asteroids had all of their sightings so rejected.

2.8.6 Cirrus

The far-infrared sky is characterized by extended, filamentary structure, particularly at 100 μm, which reaches almost to the galactic poles (Low *et al.*, 1985). Knots and ridges in the cirrus can give rise to point-like and extended sources. Cirrus can have a number of effects. First, a source due entirely to cirrus can be in positional coincidence with a point source and therefore be included in a catalog. Second, a real source detected at, say 25 μm can take its 100 μm flux from a piece of cirrus. Third, confusion by cirrus can cause a source to lose measurements at 60 or 100 μm.

In the *Asteroid and Comet Survey, 1986* the presence of 100 μm cirrus was so frequently observed that it was decided not to use any of these data for the determination of asteroid diameters and albedos. The 100 μm fluxes are tabulated, but the user must examine each case by hand before deriving diameters or other parameters. This procedure was carried over into the *IRAS Minor Planet Survey.*

Chapter 3

GROUND-BASED DATA USED IN PROCESSING IRAS SURVEY OBSERVATIONS

Edward F. Tedesco

This chapter describes the ground-based asteroid data used in producing the IRAS Minor Planet Survey final data products.

Various kinds of ground-based data were used in identifying asteroid sightings and in reducing the observed asteroid fluxes to albedos and diameters. The creation of each of these data files is described in this chapter. First the orbital element files, required for identifying IRAS sources with known asteroids, are discussed followed by those files needed in reducing the observed IRAS fluxes to diameters and albedos. Chapter 10 documents the formats of the ground-based data files and, except for the orbital element files, the files themselves are presented *in Chapter* 11.

3.1 Ground-Based Asteroid Data Required for IRAS Data Reduction

Certain kinds of ground-based data (*e.g.*, orbital elements, absolute magnitudes and slope parameters, and UBV colors) were essential for identifying sightings of known asteroids and deriving albedos and diameters from the observed infrared fluxes. Because the user needs to know the particular ground-based data used in reducing the IRAS data these data sets were included in the final data products. In addition, several supplementary data sets were included to enhance the scientific value of the final products. Some of these supplementary files were also needed to evaluate the completeness and reliability of the data reductions. A description of the ground-based data sets follows and is summarized in Table 1 below.

3.1.1 Orbital Elements

The most important ground-based data set is that of the orbital elements. From these data the known asteroids were identified and their distances and phase angles at the

time of observation by IRAS were determined. The heliocentric distance, geocentric (actually asteroid-spacecraft) distance, and phase angle were required to convert the observed fluxes to albedos and diameters. The asteroid orbital element files include data on both numbered asteroids and unnumbered asteroids with two-or-more opposition elements. These files (for 4,679 numbered and 2,632 unnumbered asteroids) were supplied by E. Bowell (Lowell Observatory).

Table 1. Summary of Ground-Based Data Files

Data Set	Contents	Use
Orbital Elements	Osculating orbital elements for 4,679 numbered and 2,632 unnumbered asteroids for each of three epochs in 1983.	Required for identifying asteroids scanned by IRAS
UBV Color Indices	U-B and B-V color indices for approximately 1,000 numbered asteroids.	The B-V color index was required to convert from photographic magnitudes to V magnitudes. U-B and B-V color indices were also used as parameters against which IRAS derived results were plotted.
Absolute Magnitudes	Magnitudes (H) and slope parameters (G) for each of the asteroids in the Orbital Elements data set.	Required to obtain the geometric albedo and diameter from the observed IRAS fluxes.
Geometric Albedos	The ADAS or estimated geometric albedo for each of the asteroids in the Orbital Elements data set.	Needed to begin the iteration of the geometric albedo using an IRAS flux.

The IRAS spacecraft conducted survey observations between February 9, 1983 and November 22, 1983, a total of 287 days. To have sufficiently accurate position predictions using a two-body ephemeris program, it was decided to provide osculating orbital elements at three epochs. This divided the mission into four segments so that

all observations were within 56 days of the epoch of a set of elements. In fact, the date-of-observation epoch difference exceeded 50 days only for asteroids observed after 12 November 1983.

3.1.2 UBV Color Indices

A new data base of UBV observations of asteroids was created and analyzed to produce a file of adopted U-B and B-V color indices.

The B-V color index was required to reduce photographic magnitudes (essentially B magnitudes) to V so that H (which is referred to the V band) could be derived from visual phase curves. The U-B color indices were not explicitly used in the IMPS data reductions but are clearly a desirable parameter and so, for the sake of completeness, are included as well.

3.1.3 Absolute Magnitudes

Absolute visual magnitudes used in reducing the infrared fluxes to albedos and diameters are from Tedesco (1990). They are in the H, G system adopted by Commission 20 of the International Astronomical Union in November 1985 (*cf.*, Minor Planet Circular [MPC] 10193) and revised at the 1991 IAU General Assembly[1]. The H, G system is described in an appendix (pages 549 - 554) in Bowell *et al.* (1989) and its application to modeling infrared flux data is discussed by Lebofsky *et al.* (1986a,b).

3.1.4 Geometric Albedo

An initial estimate of the geometric albedo was required to begin the iterative solution for the albedo given an IRAS flux. These initial albedos were either the ADAS albedo or a default albedo. The default albedo used was 0.01. Because no known asteroid has a visual albedo as low as 0.01 this choice assured that, other factors being equal, the predicted infrared flux for these asteroids is always greater than the actual infrared flux.

[1] This revision consists solely of adopting G = 0.15 in all cases where it is not explicitly derived and replaces a more complicated, ambiguous, and confusing procedure used in the 1985 system.

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Chapter 4

IRAS ASTEROID DATA PROCESSING

John W. Fowler and Joseph R. Chillemi

This chapter describes the asteroid data processing from its beginnings in the IRAS Scientific Data Analysis Subsystem through the final products generated by the IRAS Minor Planet Survey. The former system contained two beginning points for asteroid processing: prediction of known-asteroid detections and accumulation of IRAS detections that might turn out to be asteroid sightings, known or unknown. The predictions provided information on processing quality, and the accumulation provided the large data set for ongoing asteroid identification. The latter system took advantage of this knowledge to refine the information into a set of products whose scope included asteroids not yet discovered at the time the data sets were created.

The scientific processing of the asteroid data began in the Science Data Analysis Subsystem (SDAS). This system reduced the observations to physical units and generated maps and catalogs of the fixed sources seen on the sky. SDAS was designed to recognize known solar-system sources and to save all other likely solar-system objects for later analysis. This analysis was accomplished using specially designed software known as the IRAS Minor Planet Survey (IMPS), which is described in §4.3 below.

The first step in recognizing asteroids in SDAS was the computation of their expected apparent positions on the sky. This task was carried out by the Asteroid Predictor. It generated positions as functions of time, which were then compared with the observed sources and labelled as Known Sources in the same way and by the same software module in which bright infrared stars were identified and labelled when their observations appeared in the data stream. This predictor is therefore the first piece of asteroid software, so it is discussed first.

In SDAS a variety of tests were applied to the observations in order to separate fixed sources on the sky from those whose fluxes varied greatly either due to intrinsic

variation of the source or due to change in apparent position, as would be the case for most solar-system sources. Sources failing this test and having "solar-system-like" colors were written onto magnetic tape for later processing. The package of software which carried out this analysis is known as the Asteroid Tagging Algorithm (ATA). The description of the ATA is given in §4.2 below.

4.1 The SDAS Asteroid Predictor

A description of the "known source correlation" processing in SDAS is given in the IRAS Explanatory Supplement (*ES* §V.D.4). This task was performed by a processor named PSCORE for each individual survey observation, which also was the unit of processing in SDAS. The telescope scan control parameters were used to reconstruct the path of the boresight on the sky, and the positions of inertially fixed sources were mapped into the focal-plane coordinate system, in which individual detectors crossed by the image were identified.

The problem was slightly more complicated for solar system objects. In these cases, when the first observation of a SOP was processed, an ephemeris which covered the SOP period was computed for each object in the list of 2500 numbered asteroids, twelve comets, and the outer planets. (Note: This number of asteroids is quite different from the number used later in IMPS, which also did not deal with comets or major planets). Then for each observation, a temporary file was set up which appeared to be just another file of inertially fixed sources to PSCORE. The positions in this file were obtained as follows.

The positions of the moving objects were computed at the beginning and end of the SOP period (about twelve hours) and at sufficient times in between to guarantee an ephemeris for each object with no more than about ten arcminutes separation between snapshots along the path of apparent motion. This was done once for each SOP. Apparent positions were computed in the spacecraft-centered coordinate system. Standard methods were used to compute the ephemerides from osculating orbital elements. Only objects with elliptical orbits were included (in one case, an elliptical approximation to a hyperbolic orbit was used).

As each observation was processed, the positions of all the objects were interpolated to the mid-observation time, and then the time of closest approach of the boresight to the position of each object was interpolated from the scan geometry. The regularity of the scan rate allowed an accuracy of better than three seconds in the predicted scanning time.

Whenever the geometrical calculation indicated a possible intersection of the telescope field of view and the trajectory of one of the moving objects, the approximate crossing time was used to re-interpolate the apparent position of the moving object. This included a first-order light-time correction based on the distance from the spacecraft to the object. The telescope pointing history included aberration corrections for the orbital motion of the earth and the spacecraft. This detailed pointing reconstruction permitted accuracy of better than 0.1 second in the predicted time at which the image crossed each detector. The apparent position of the object was then used as that of an inertially fixed object for the remainder of the computation. In other words, once the file of pseudo-fixed sources was prepared, the rest of the processing did not depend upon the fact that solar-system objects were involved.

After the detector data streams had been processed to extract point-source detections, and after these had been subjected to seconds confirmation and band merging (see *ES*, §V.C and §V.D), the known-source predictions were sought among the observations. In order to avoid flux biases, this was done on a position-matching basis only. Associations were tagged by storing the known-source identification codes in the observation data records.

4.2 The Asteroid Tagging Algorithm

The Asteroid Tagging Algorithm (ATA) was a post-processor subroutine of the IRAS SDAS Hours Confirmation Processor (*cf., ES*). After all normal processing for each seconds-confirmed sighting was completed, the ATA processed the sighting to determine whether it might possibly be a solar system object.

4.2.1 Input Data

The ATA processed the sighting record with which the main hours confirmation processor (PHRCON) had just finished working. At the same time, a field of sightings serving as candidates for hours confirmation remained in a core buffer, and this was also made available to the ATA. In order to be considered usable, a sighting was required either to be seconds-confirmed or at least to have its failure to be seconds-confirmed explainable by the passage of its image over a dead or noisy detector. The parameters defining each detector were as follows:

1950.0 mean ecliptic longitude, latitude, and twist angle,

Position error parameters on the scan and cross-scan axes,

Fluxes and flux error parameters in the four survey channels,

Detection time and detector identification array,

Status words describing flux quality and confusion level, and

Known-source identifier (zero if no association).

The main routine also provided a set of pointers to hours-confirming candidate sightings, if any.

A. Drop-Dead Sighting

The IRAS SDAS hours confirmation processor operated on a first-in-first-out buffer of sightings spanning 36 hours of survey data. In principle, up to 36 hours could pass before hours-redundant coverage was obtained for any given point on the sky. All data were processed in time order. Hours confirmation was performed for the oldest detection in the 36-Hour File, which was required to be hours-confirmed or to be rejected as soon as the buffer had received data time-tagged at least 36 hours later. For this reason, the sighting being processed was given the name "drop-dead" sighting.

B. Candidate Sighting Buffer

Each drop-dead sighting was accompanied by a collection of other sightings to be used as candidates for hours confirmation of the drop-dead sighting. This collection was formed by gathering together all detections in the 36-Hour File within a spatial window centered on the drop-dead sighting. This window spanned twenty arcminutes of ecliptic longitude and ten arcminutes of ecliptic latitude. The shape was chosen to accommodate the tendency of the position error to be greater in longitude than latitude, and to improve the chances of including subsequent sightings of the same asteroid which produced the drop-dead sighting. The window could not be made larger because of execution time limitations.

4.2.2 SDAS Asteroid Data Output

The asteroid data output from SDAS for processing later by IMPS consisted of positions, fluxes and various status words and other parameters. These were extracted and written to two files as described in the following.

A. CN28 and CN29

The CN28 data file contained a record for each potential asteroid sighting. The CN29 data file was essentially identical, except that it was generated at the weeks-confirmation level, but in fact no additional useful information was contained in this file and it was not used.

B. Statistical Data

Certain statistical parameters were computed by the ATA to aid in tuning the thresholds for asteroid recognition. These included dispersion parameters in position and color, counters for correct and incorrect identifications of known asteroids and known inertially fixed point sources, histograms of asteroid sighting group sizes, and correlation analysis of observed vs. predicted apparent motion in ecliptic longitude and latitude. Many plots of these data are shown in Chapter 6.

4.2.3 Processing

The ATA module was called by the main hours-confirmation routine at the end of the processing for each drop-dead sighting. The ATA processed only seconds-confirmed sightings and candidates. If the drop-dead sighting was hours-confirmed, then the search for associated asteroid sightings was confined to the candidates which the main processor had marked as the confirming sightings; otherwise, all sightings in the coarse processing window were examined by the ATA. This was the only processing step which depended on whether the drop-dead sighting had been hours-confirmed.

A. Main Logic Flow

Each drop-dead sighting was required to pass a color test designed to eliminate objects with non-solar-system colors. If this test was passed, the object was included in file CN28. Whether any other sightings were grouped with it was determined by several additional tests. In order for a candidate sighting to be regarded as a potential sighting of the same asteroid as the drop-dead sighting, it had to pass the same asteroid-color test, followed by a pair of tests which measured its photometric similarity to the drop-dead sighting. The first of these was a flux test, and the second was a color-similarity test. If these tests produced acceptable results, then a motion test was applied to verify that there was at least some probability that the object was moving. Three of the tests required more than a simple yes/no measurement, and the quantity which was computed to decide the issue is referred to as a "figure of merit".

B. Asteroid Color Test

Each object tested for solar-system color was first classified by a spectral combination code. This indicated the combination of survey channels in which a point-source sighting had occurred. In the case of single-band objects, limits on the colors were obtained from the upper-limit noise estimates in bands adjacent to the detection. Each spectral combination had its own threshold.

The color test involved forming a chi-square parameter as follows. With four survey channels, three independent colors are possible, and so a three-dimensional color space was employed. The locus of points corresponding to solar-system objects was modelled as a straight line joining the points provided by a standard thermal model (see Chapter 7) for an asteroid at 0.87 AU and one at 40 AU. Sightings with three colors were treated as a point in this space; sightings with two colors were treated as points in the corresponding plane, and the projection of the model line into that plane was used as the nominal locus of points for solar-system objects. Sightings with only one color were treated as points on the corresponding axis, and the projection of the model line onto that axis was used as the range into which the point should fall. In practice, the only single-color sightings were those observed only in the 12 μm channel or the 100 μm channel, since two color estimates could be derived from the noise-fill upper limits for the other single-band sightings. For example, a sighting detected only in the 25 μm band had detector noise data for the 12 μm and 60 μm bands from which two low-quality color bounds could be obtained. Of course, these had larger uncertainties than colors derived from full-fledged detections, but they often sufficed to rule out spurious data.

Once the appropriate color space was determined, the minimum distance from the observed point to the nominal locus was computed and treated as an error vector. The squared components of this error vector served as the numerators of the chi-square terms; the corresponding denominators were the *a priori* uncertainties in the observed colors. This produced a chi-square parameter with one, two, or three degrees of freedom, depending on the number of independent colors available. The figure of merit was taken to be the fraction of all chi-square random variables with the same number of degrees of freedom and larger magnitudes. Thus the figure of merit ran from nearly zero for very large error vectors to nearly unity for very small error vectors.

The computation of the minimum distance from the observed color point to the nominal locus took into account the finite extent of the locus. In other words, the nominal locus was a finite line segment; the error vector was first computed as the perpendicular displacement from the line containing this segment to the observed color point; if the error vector intersected the line outside of the range of the nominal

locus, then a non-perpendicular line from the nearest end of the nominal-locus range to the observed color point was used instead. In the case of single-color observations, the test degenerated to whether the point was contained within the locus projection on the axis; if so, the error vector was null, and otherwise the distance from the observed point to the nearest end of the locus range was used as a one-dimensional error vector.

The figure of merit was required to be above a threshold set for the specific spectral combination of the sighting. If the drop-dead failed this test, the ATA ceased processing it, proceeding to the statistical computations described below. Candidates which failed the test were dropped from consideration.

Note that while the four IRAS survey channels yield three independent colors in the sense that there are three degrees of freedom, the colors are not all statistically independent. The error in the color derived from the first and second bands is correlated with the error in the color derived from the second and third bands, because the error in the second band affects both colors. The correlation coefficient for the random errors in these two colors is 0.5. Ignoring the correlation resulted in underestimating the variance of the corresponding chi-square parameter by 20%. In the case of three-color tests, the variance was underestimated by 25%. While these correspond only to errors of 11% and 13% in the standard deviation, and hence are about equal to the estimation error in the *a priori* photometric random error, the thresholds for the corresponding spectral combinations were nevertheless set lower than for other combinations in order to compensate for the approximation error.

C. Common Flux Test

The common flux test employed all bands in which the drop-dead and candidate sightings were both detected; if there were none, the test was skipped. The test simply required the fluxes in such bands to be within a factor of ten of each other. This accepted more than the highest known light-curve variation of the time scale of a few hours, while eliminating the most obvious mismatches.

D. Common Color Test

The colors of each sighting in the pair to be tested were computed as described above in §4.2.3 B *i.e.*, with color bounds based on detector noise used for bands in which no detection occurred). Only colors common to both sightings were used, and if there were none, the test was failed. Otherwise a chi-square random variable was computed by summing terms with numerators equal to the squared difference in a common color and denominators equal to the sum of each sighting's error variance for

the corresponding color. The number of degrees of freedom was the number of terms summed, and the figure of merit was the cumulative chi-square distribution for that number of degrees of freedom evaluated at the observed value of chi-square. This figure of merit was required to be above a threshold which depended upon the number of bands detected. The corresponding fractions of all true sightings pairs intended to be retained ranged from 0.99 to 0.998.

E. Angular Motion Tests

An apparent angular motion test was performed which examined pairings of the drop-dead sighting with each hours-confirmed candidate, if any. This test was not required if the drop-dead sighting was not hours-confirmed. The test employed the mutual position information of the drop-dead sighting and the candidate to determine whether it was consistent with the hypothesis that the object was moving. The figure of merit was an approximation to the probability that the true position of the drop-dead and candidate sightings were not contained within the same small region of sky corresponding to a square approximately 2.4 arcminutes on a side. This probability was required to be above 0.001. This eliminated only sightings that were virtually certain to be inertially fixed, *i.e.*, sightings with very low position uncertainties and very good position agreement. Hours-confirmed sightings with medium-to-low confirmation scores passed this test easily.

F. Known Object Analysis

After completing all decisions concerning whether sightings were moving objects, a check of the known-source identifier in the drop-dead sighting's parameter record was made; if any accepted candidates had been found, these were also checked. Values of zero indicated that the sighting was not a known object; values between one and 30,000 indicated that the sighting had been associated with an inertially fixed object; values above 30,000 indicated association with a solar-system object.

In most cases, all sightings either were not associated with any known object, or else they were all associated with the same known object. Separate counters were maintained for the combinations listed in §4.2.3 G.

G. ATA Sighting Association Counters

Rejected drop-dead sightings

1. Not a known object
2. Known solar-system object
3. Known inertially fixed object

Accepted drop-dead sightings

4. No sightings of known objects
5. Some sightings of known objects
6. All known objects were solar-system objects
7. All known objects were inertially fixed objects
8. Some solar-system and some inertially fixed objects

The statistical parameters discussed in the next section were maintained for each of the combinations above. When known solar-system objects were found, they were output to CN28 even if they had failed to be accepted by the ATA. When known inertially-fixed objects were found, they were not output to CN28 even if they had been accepted by the ATA. The separate statistical analysis for each combination was used to tune the threshold parameters.

H. Statistical Data Gathering

All statistical counters were broken down into ten groups based on the highest signal-to-noise ratio in the set of sightings. In addition, a breakdown by the various combination of known-object identifiers was performed. For known asteroids, correlation coefficients were computed from observed and known motion rates in latitude and longitude. Excellent correlation in latitude was obtained, but as expected, the lower resolution in longitude yielded marginal statistical significance.

4.3 The IRAS Minor Planet Survey (IMPS)

The scientific processing and analysis of the asteroid data was the chief goal of the IRAS Minor Planet Survey (IMPS). As its input, IMPS took the file of candidate sources originally compiled by SDAS, as well as other files of asteroid information supplied by E. Tedesco (*cf.*, Chapter 3). The chief output from IMPS was the series of data products presented and described in Part II. This chapter presents a technical documentation of IMPS. The description is organized in the order of input, output and then the details of the various processors and their algorithms.

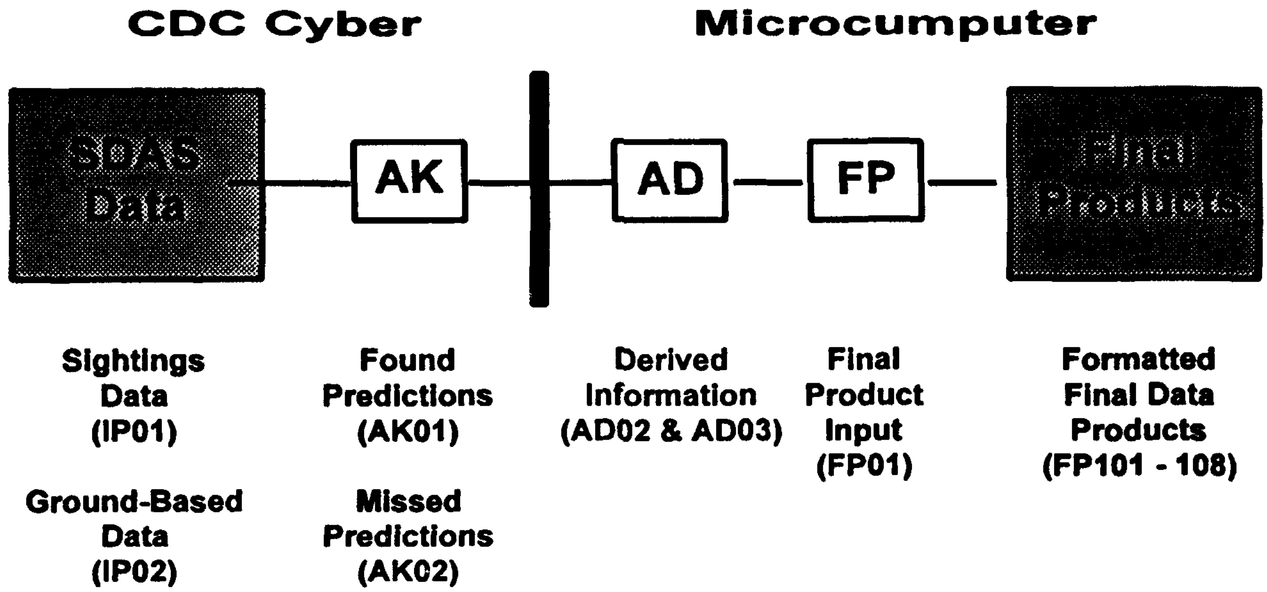

Figure 1. Schematic diagram of IMPS data flow. Filed boxes indicate input and output, open boxes the major subsystems used in processing potential asteroid sightings. Intermediate files produced are indicated below each subsystem. The heavy vertical line indicates the interface between the computing platforms used to perform the processing.

Before getting into the details, it is useful to orient oneself by studying a block diagram of the system presented in Fig. 1. Data input and output are shown as shaded boxes. The other boxes show the various processors and other parts of the system. The reader will note that IMPS is split across two hardware platforms, the CDC Cyber mainframe and the PC workstation. The mainframe was needed to hold the large amount of input data to IMPS (comprising about 700 megabytes) as well as the AK processor, which, for the large number of asteroids that IMPS processed, is a very CPU- and I/O-intensive program. Once AK produced its output files, these files could then be transferred to the PC workstation where subsequent processing and user interface tools could be implemented.

The AK processor handles position association for known asteroids (*i.e.*, Asteroids, Known = AK). AD is where radiometric diameters and albedos are calculated (*i.e.*, Asteroids, Derived parameters). FP stands for Final Products. FP is essentially a threshold and format processor. Here the final acceptance parameters for accepted sightings can be set or reset just prior to producing the Final Data Products. Some of the processors have subprocessors, and their names always have the letters of the parent processor as the first two letters.

Most of the work of the processors is accomplished by setting flags or by filling in blank parameters with meaningful values. All of the sightings remain available in the parent data base. The data base as actually implemented contains a variety of files not shown in the high-level schematic of Fig. 1, and these will be discussed later as needed.

The primary goal of IMPS is to obtain derived information concerning asteroids with reliable orbital elements. The first implementation task was to set up the input data bases; this comprises the shaded box in Fig. 1 labeled "SDAS Data". The main data bases are those known as IP01 and IP02, the IRAS sightings and the ground-based asteroid data bases, respectively. The former is primarily composed of the ATA output, but space was included for key IMPS parameters to be added. The latter is similar to the numbered-asteroid data base used by SDAS, but is considerably expanded in terms of the number of objects involved and the physical parameters included; three sets of orbital parameters were provided for each asteroid to better define its position in space for the period during which the IRAS satellite was operational.

The second task was to tag sightings in the IP01 data base with predicted sightings of known asteroids. This yielded, among other parameters, figures of merit regarding the positional coincidence of sightings to solar-system objects; thresholds for this quantity governed acceptance and rejection of sightings at later stages.

The third task was to derive albedos and diameters for the known asteroids which were found in the IP01 sightings file. This involved computing these parameters for each IRAS detection of the object in any survey band, and then averaging them to obtain the best overall estimates for each object. In the process of averaging the data, considerable editing was performed to remove suspected spurious results caused by the various IRAS noise sources. Some asteroids had no usable data remaining after this editing.

The fourth task was to gather all of the information together into the formats needed for deliverable products (machine-readable data bases and hard copy) and to produce documentation describing these products and the steps taken to obtain them.

4.3.1 Input Data

Input came from a variety of sources, some generated by machine, others compiled by hand. There were seven machine-readable input files used. A complete description of the ground-based files used is found in Chapter 11 of this volume. A summary of the IMPS input files include:

IP01	- probable asteroid sightings (~2.7 million)
IP02	- known asteroid orbital elements
PR04	- IRAS survey observation parameters
SHEF	- Spacecraft Heliocentric Ephemeris
Thermod	- asteroid thermal model
XYZSun	- solar ephemeris
AACV	- IRAS boresight area coverage

4.3.2 Output Data

The output from IMPS consisted of a number of asteroid data products. These are described in Chapter 9, the formats of the machine-readable files are given in Chapter 10, and the hard-copy versions are given in Chapters 12 through 16.

4.3.3 Data System Flow

The input data bases were set up as previously described in §4.3.1. The next data set produced was the file AK01, which contained pointers and association information linking objects (*i.e.*, numbered asteroids) with sightings in IP01. AK01 provided the mechanism for accessing sighting data for any given object in all downstream processors. Predicted sightings which were not realized were recorded in AK02; this included sightings which were actually impossible because, for example, the source was too faint or the image crossed dead detectors, etc. Positional associations of AK01 records with IRAS Catalog objects, Faint Source Survey objects, and members of other astronomical catalogs were made off-line and recorded in the appropriate status word bit (in AStatW) in IP01.

At this point, ASCII-formatted files containing pertinent information from IP01, IP02, AK01, and AK02 were down-loaded to the PC workstation for all subsequent processing.

Albedos and diameters for the solar-system objects, computed by the AD subsystem for each detection of the known object in any survey band, were output to files AD02 and AD03. Upper limit derivations of albedos and diameters were output to file AD04. Processing log files were also maintained.

The FP subsystem performed the editing of the AD02 and AD03 data and the averaging of the remaining estimates for each source. This produced the intermediate files FP01A and FP01B for asteroids types 1 and 2, respectively. Then another FP module gathered all of the various parameters together from all the different files and produced the machine-readable versions of the final products for known objects.

4.3.4 System Processing Steps

A. Input Data Preprocessing

Input data preprocessing was performed by the IN subsystem. This involved the following tasks:

a. Conversion of CN28 (ATA output) to IP01

b. Association of IP01 sightings with CN29 records

c. Setting of high-density-region flags in IP01 records

d. Setting of faint-asteroid flags in IP01

e. Conversion of the SDAS Area Coverage File to the ADAS Area Coverage File

f. Uploading and formatting of the Known Object File (IP02)

g. Conversion of the SDAS Spacecraft Heliocentric Ephemeris File to the ADAS Spacecraft Heliocentric Ephemeris File

h. Apply SDAS final calibrations (including hysteresis corrections) to IP01 fluxes

i. Setting of outer-slot-only flags for IP01 sightings whose detectors all bordered the cross-scan survey array limits.

B. Known Object Prediction

Each object in the IP02 data set was processed by the AK subsystem to search for matching IRAS sightings. The entire mission was searched for each object before going on to the next. The process for a single object was performed in two phases: first geometrical coincidence of the object's trajectory with that of the scanning telescope was sought; then all such coincidence times were checked for actual sightings occurring sufficiently close in position and time. The first phase was performed by a module named AKSOPS, and the second phase was performed by a module named AKSITS. The algorithms used by these modules will be described next.

The AKSOPS Module

AKSOPS first determined all of the Area Coverage File (AACV) bins that the asteroid traversed during the entire survey mission. The AACV bins are records in a direct-access data set; each bin corresponds to a particular area of the sky, and the contents of the record are times of entry and exit of the telescope boresight with respect to that area of sky. The bin numbers were buffered in an array, and duplications were eliminated. Then each bin was examined to see when the IRAS telescope boresight traversed it. Whenever a telescope entry and exit time pair was found to overlap the time during which the asteroid was in the bin, the asteroid position was recomputed for the midpoint time of telescope boresight passage. The boresight typically spent from a few seconds to a few minutes in any given bin. With the refined asteroid position, the PR04 data for the observation involved was checked, and the solar aspect angles of the asteroid and the boresight were compared. If they were within sufficient proximity of each other, the trajectory-crossing parameters were prepared for AKSITS, and the crossing counter was incremented.

Standard techniques were used to compute positions as functions of time for the osculating orbits about the sun and for transforming these into the 1950.0 mean ecliptic coordinate system. The vector from the spacecraft to the asteroid (expressed in the same system) was obtained by subtracting the vector from the sun to the spacecraft from the heliocentric asteroid vector; the spacecraft vector was obtained by interpolation from the Spacecraft Heliocentric Ephemeris File (SHEF).

The position of the asteroid was computed for a variety of times as a search for all of the AACV bins it traversed was carried out. These times were chosen in the following way. First the mission start time was taken as the epoch of interest. Each asteroid has three sets of orbital elements corresponding to times distributed over the IRAS mission. The orbital element set whose time tag was closest to the epoch being processed was selected each time a position was to be computed. The SHEF file was read up to the first epoch, and the counter for the number of asteroid-telescope crossings was initialized to zero. The asteroid position for the time point was computed, and the time needed to travel ten arcminutes (as seen from the spacecraft) was computed. This time interval is denoted DELTIM. and it is obtained as described below. This distance was chosen to control the sampling of the asteroid position because it eliminated the possibility of skipping over a bin crossing by the asteroid.

In the orbital plane, standard (x,y) coordinates are defined by

$$x = a \cos E \tag{1}$$

and

$$y = b \sin E \tag{2}$$

where a is the semimajor axis, b is the semiminor axis, and E is the eccentric anomaly (obtained by solving Kepler's equation for the time point being processed). The origin of this coordinate system is not the sun, but that does not matter since we will be using only the derivatives. Note also that these (x,y) coordinates are not consistent with the IRAS conventions, and this will have to be reconciled below. We have

$$dx = -a \sin E \, dE \tag{3}$$

$$dy = b \cos E \, dE \tag{4}$$

The energy integral of motion for the two-body problem provides the relation

$$v^2 = k^2 M_s \left(\frac{2}{r} - \frac{1}{a}\right) \tag{5}$$

where k is Gauss's gravitational constant, and M_s is the mass of the sun. This last equation yields the magnitude of the velocity vector, and the two preceding it can be used to obtain the direction. Noting that

$$\frac{b}{a} = \sqrt{1 - e^2} \tag{6}$$

we can construct a vector (w_x, w_y) which is parallel to the velocity vector (dx/dt, dy/dt), or

$$w_x = -\sin E \tag{7}$$

$$w_y = \sqrt{1 - e^2} \cos E \tag{8}$$

This can be unitized by dividing by the root-sum-square magnitude w, which can be reduced to

$$w = \sqrt{1 - (e \cos E)^2} \tag{9}$$

This leads to the velocity vector components

$$v_x = -\frac{v}{w} \sin E \tag{10}$$

$$v_y = \frac{v}{w} \sqrt{1 - e^2} \cos E \tag{11}$$

We will now relabel the axes so that they are consistent with the IRAS conventions used elsewhere throughout this document. This involves identifying the x component as the IRAS z component, the y component as minus the IRAS y component, and setting the IRAS x component to zero, so that

$$v_x = 0 \tag{12}$$

$$v_y = -\frac{v}{w} \sqrt{1 - e^2} \cos E \tag{13}$$

$$v_z = -\frac{v}{w} \sin E \tag{14}$$

This vector must be rotated about the x-axis in order to align the z-axis with the line of nodes; then it can be transformed into the IRAS (1950.0) mean ecliptic coordinates by the standard Euler rotations. The velocity of the earth can be approximated to sufficient accuracy for these purposes by assuming its mean magnitude, 29.786 km/s, and a direction given by the cross product of the ecliptic north-pole unit vector with the unit vector from the sun to the spacecraft. This is subtracted from the asteroid's velocity vector; we will denote the result V_v and the vector from the spacecraft to the asteroid will be denoted V_s. Then the angle θ between V_v and V_s is

$$\theta = \cos^{-1} \frac{V_v \cdot V_s}{|V_v| r_s} \tag{15}$$

where $|V_v|$ is the magnitude of V_v and r_s is the magnitude of V_s. The component of the velocity vector perpendicular to V_s is therefore v sin θ, and since this is viewed from a distance of r_s, the angular velocity of the asteroid as seen from the spacecraft, μ_s, is

$$\mu_s = \frac{v \sin\theta}{r_s} \tag{16}$$

The time required to traverse approximately ten arcminutes (actually, three milliradians) is

$$\Delta T = \frac{0.003}{\mu_s} \tag{17}$$

The second time point follows the first by the interval ΔT. At this new epoch, the position and velocity were recomputed, along with ΔT; in this way, the time required to traverse about ten arcminutes was continually re-estimated, and this permitted the set of time points to be generated.

At *each time point*, the asteroid position was obtained. A search square was centered on the asteroid position such that the sides of the square were aligned with the local lines of longitude and cross-longitude of the L0 (1950.0 mean ecliptic) system, with a half-width of five milliradians. The four corners of this square defined points in latitude and longitude for which the AACV bins numbers were obtained via a standard mapping algorithm. All bin numbers were buffered in an array, with duplicates removed.

The SHEF data were read and interpolated for each time point. The SOP granularity of the time domain affected the generation of time points in a way which modified the description above slightly. This involves constraining the beginning and ending times of each SOP to be used as time points, so that brief visitations in certain bins will not be overlooked.

After all bin numbers were identified for a given SOP, the following processing was performed before going on to the next SOP. The Area Coverage File data for each bin number were read in, and for each boresight passage in the bin, the mean of the entry and exit times was computed; the asteroid position at this time was computed as described previously. The SHEF data were interpolated to the time being processed,

and topocentric correction was performed. This yielded the vector from the spacecraft to the asteroid; this was not yet corrected for one-way light time delay, but this correction was usually much less than 30 arcseconds. While this is still more than the topocentric correction, the approximate asteroid position was used only for a relatively coarse search (the light-time delay was accounted for later in AKSITS). The spacecraft position vector was sufficiently accurate to be used again in the more detailed asteroid position computation in AKSITS, and so it was retained in a buffer for that purpose.

The PR04 data for the time being processed were read in next, and the mean value of the boresight Euler angle ν was found, $<\nu>$; the corresponding angle for the asteroid, ν_a, was computed as follows.

$$\nu_a = \cos^{-1}(\cos\beta \, \cos(\lambda - \lambda_\odot) - \frac{\pi}{2}) \tag{18}$$

where $\lambda_\odot$ is the solar longitude at the middle of the OBS, and λ and β are the longitude and latitude of the asteroid in the L0 system (1950.0 mean ecliptic), corresponding to the vector computed by subtracting the sun-to-spacecraft vector from the sun-to-asteroid vector. This vector is denoted V_a and is defined in the L0 system, which has its Z axis in the direction of the north ecliptic pole and its X axis in the direction of the vernal equinox; therefore

$$\lambda = \tan^{-1}\frac{-V_{a2}}{V_{a3}} \tag{19}$$

$$\beta = \tan^{-1}\frac{V_{a1}}{\sqrt{V_{a2}^2 + V_{a3}^2}} \tag{20}$$

If the absolute value of (ν_a - $<\nu>$) was less than 15 arcminutes + 3 σ_ν, then *geometrical coverage was considered to be detected, a crossing counter (ICRS) was* incremented by one, and the crossing parameters were loaded into a buffer array for later use by AKSITS. The estimated detection time T_{ICRS} was computed as follows: the asteroid's angle about the sun vector, ψ_a, is

$$\psi_a = \tan^{-1}\frac{\cos\beta\ \sin(\lambda_\odot - \lambda)}{\sin\beta} \tag{21}$$

If this was negative, 2π was added; this made ψ_a conform to the range of the boresight's angle about the sun vector. The time it would take the boresight to get to the asteroid from its position ψ_0 at time T_0 is $(\psi_a - \psi_0)/\psi'$, where ψ' is the mean scan rate of the angle about the sun vector during the scan; adding this scanning time to T_0 yielded the estimated time of closest approach of the boresight to the asteroid. Since detection should occur a few seconds before this, two seconds were subtracted, and the result was stored in T_{ICRS}.

When all of the bins identified for possible geometrical crossing had been prepared, the next SOP was processed as described above until the entire mission had been covered for the given object. At that point the value of the crossing counter, ICRS, provided the number of predicted crossings of the asteroid by the IRAS focal plane.

The AKSITS Module

AKSITS processed the geometrical crossings one at a time; for each one, the following processing steps were executed.

A time window was set up by adding and subtracting ten seconds to the T_{ICRS} for the crossing being processed. Then the one-way light-time correction was computed by dividing the distance to the asteroid from the spacecraft by the speed of light. This correction was subtracted from the time for which AKSOPS computed the asteroid position, and this position was recomputed. The vector from the spacecraft to the asteroid was computed by subtracting the sun-to-spacecraft vector from the sun-to-asteroid vector, where the former is the one for the expected instant of observation, and the latter is for the time that the light left the asteroid. The asteroid position computation was performed as described above.

When the asteroid's L0 position angles (as seen from the spacecraft) had been computed, a time window of IRAS sources was examined to see how well each position matched that of the computed asteroid position.

Position agreement was tested as follows. A coarse latitude test was applied first; this eliminated most of the sightings in the time window. If the latitude test was satisfied, a dot product test was performed. Unit vectors toward the computed asteroid position and the sighting were dotted, and if the result was less than 0.9999 (*i.e.*, the angular

separation was 0.8° or more), the sighting was discarded; otherwise the fine position test was performed.

The fine position test is the same one used by the SDAS PSCORE processor (see §4.1). It computed the cross-covariance of the two position probability density functions (*i.e.*, for the sighting and the computed asteroid position) evaluated at the observed separation, and required the result to be above the threshold 1000 (the density functions had units of probability mass per steradian). If this test failed, the sighting was discarded; otherwise it was checked against any previous acceptable results which may have been found. If there were any, then bit number 31 in the AStatW status word was turned on to flag possible confusion, and the association with the higher test result was retained.

The units employed in the position probability density functions resulted in the figure of merit having a large value (1,000 up to as much as one billion). The corresponding figure of merit used subsequently in IMPS (for such things as final product filtering) was obtained by taking the common logarithm of this figure of merit, subtracting three, and dividing by six. This resulted in a number between zero and one.

A flux ratio test was applied to all sighting/prediction pairs which passed the fine position test and for which the sighting had a signal-to-noise ratio of at least 5.0 at 12 μm or 25 μm. In such cases, if the sighting's flux was not within a factor of three of the flux predicted by the standard thermal model in either band, then this failure was flagged by setting AStatW bit number 7. If any other sightings also passed the fine position test, the best of the unflagged ones was kept, if any, even if the position score was less than that of a flagged sighting.

After the time window of sightings was exhausted, AKSITS noted whether any associations had been made. If not, then a missed-prediction record was written to the AK02 file. If an association was found for the current prediction, then a check was made for an existing AK01 record which would indicate that the sighting involved had already been used in a previous match with another known object. In such a case, AStatW bit number 30 was set, and if one and only one of the two was flagged as having failed the flux test, the other was kept, and otherwise the association with the higher test result was retained.

If there was no conflicting match, or if there was and the current association was preferred. then AKSITS generated an AK01 record to record the association for the given crossing.

After each predicted sighting for the current asteroid had been processed, AKSITS went on to the next predicted sighting until all had been processed.

C. Derived Information Processing

Albedos and diameters were computed for each known object by applying the same algorithm to each detection in any survey band. The results were averaged for each object later during final product preparation, at which time additional editing criteria were applied to weed out unreliable data. The computation of albedo for each detection employed a table of normalized fluxes as a function of Bond albedo and heliocentric distance; this table (*cf.*, Appendix 4) was provided by L. Lebofsky and was derived from the IRAS standard thermal model (*cf.*, Lebofsky *et al.*, 1986a,b). The remaining discussion in this section will be concerned with the computation of the albedo for a given detection of a given asteroid.

It is well known that source detection via thresholding on flux or signal-to-noise ratio induces a flux overestimation near the threshold. Corrections for this effect were derived empirically from measurements of asteroids observed by both the IRAS instrument and the Infrared Telescope Facility (IRTF) at Mauna Kea (See §8.3.2 for complete details). The correction was applied to all detected fluxes with signal-to-noise ratios (SNR) between 3.0 and 10.0. The correction factor was interpolated linearly between these values, with the correction factor being 0.725 at SNR = 3.0 and 1.0 at SNR = 10.0. This was done before iteratively computing the albedo and diameter. The flux uncertainty for corrected bands was increased by root-sum-squaring it with the flux correction.

In addition, another correction was applied after the albedo had been obtained; a correction factor of 1.12 was applied to albedo solutions using data from 25, 60, and/or 100 µm . This was done in order to eliminate an observed bias between these bands and the 12 µm band. (See §8.3.3 for further details).

An initial estimate for the geometric albedo p_H was taken by assuming the IP02 value. Then the following iteration was performed. After the first band was processed, any subsequent bands began iteration with the previous albedo solution.

1.) The phase integral Q was obtained from integration over the IAU Commission 15 visual (V) wavelength phase function,

$$Q = 0.29 + 0.684G \qquad \textbf{(22)}$$

where G is the slope parameter.

2.) The Bond albedo was computed from the phase integral and the current estimate for the geometric albedo,

$$BOND = Qp_H \tag{23}$$

The Bond albedo was used for looking up and interpolating fluxes in the thermal-model table.

3.) The current estimate for the radius was obtained from

$$R = 0.5 \times 10^{(3.1236 - 0.2H - 0.5 \log p_H)} \tag{24}$$

4.) The flux was interpolated in the thermal model table for the current albedo and heliocentric distance. The interpolation was linear in albedo and quadratic in heliocentric distance; the flux was then scaled for the current estimate of the radius and the distance from the spacecraft to the asteroid, and the phase-angle correction was applied by the formula

$$F = 10^{\frac{-0.572958\,|\alpha_p|}{2.5}} \tag{25}$$

where α_p is the phase angle in radians; the interpolated flux corrected for the radius and viewing distance was multiplied by F.

5.) The ratio of the computed flux to the observed flux was calculated, and the absolute deviation from unity was tested for convergence. If it was less than 0.00001, then the albedo was considered converged, and for bands 2, 3, and 4 (*i.e.*, 25 μm, 60 μm, and 100 μm) the correction factor of 1.12 was applied and the radius was recomputed. If convergence was not achieved, but the number of iterations had reached 100, then iteration ceased, and the failure to converge was flagged by setting bit number 1 in the ADSTAT status word for the band. Otherwise the geometric albedo p_H was scaled by the ratio of the computed flux to the observed flux, and the iteration resumed at step (1.) above.

The uncertainties, σ_{pH} and σ_R in the geometric albedo and radius, respectively, were computed as follows. The radius was treated similarly to the albedo, so only the latter will be discussed. The iteration described above was repeated with the one-sigma IRAS flux uncertainty added to the observed flux. The solution for the albedo in this case was subtracted from the unperturbed value for that band, and the absolute difference was taken as the one-sigma uncertainty due to the error in the IRAS flux.

D. Data Base Management

Nearly all of the computer files used during IMPS production on the CDC mainframe were defined as keyed segment access files to greatly decrease computer I/O overhead in dealing with the large files defined in §4.3.1. A user-defined access key is used to point directly to the records desired in the data base. The data access key used was the TNAM/DNAM of an individual sighting, that is, the first time and telescope detector ID of initial detection, which is guaranteed to be a unique sighting identifier.

Given this unique data access key, information for a particular sighting could be easily retrieved from IP01, as well as prediction information from AK01. Most of the data base access routines were primitive subroutine calls to read the various files whose retrieved record's data would be stored in a FORTRAN COMMON block used by the calling program.

E. Special Processing

The Special Processing (SP) subsystem performed a variety of miscellaneous services. These included computing the geometrical coverage completeness for specific orbital element sets (see Chapter 8), and generating a large set of ad hoc intermediate products to support quality checking and the setting of thresholds for final product preparation (see Chapters 5 and 6).

F. Final Product Preparation

Albedo averaging was performed for each known object by forming a set of albedos composed of those determined from each detection in any survey band, editing this set according to certain rules, and averaging the remaining values. The values averaged were also tested for the presence of significant flux variations. Final diameters were computed directly from the final albedos.

The initial editing involved careful inspection of each sighting's status words, and certain conditions eliminated the sighting from further consideration. The following conditions eliminated entire sightings.

1.) The sighting was associated with a source in the IRAS Working Survey Data Base (WSDB), Point Source Catalog (Ver. 2), Faint Source Survey Catalog (Ver. 2), or Serendipitous Survey Catalog.

2.) All detections occurred on detectors at the edge of the survey array.

3.) More than one IRAS sighting passed the position-match test with the asteroid's predicted position.

4.) The cross-scan position uniform uncertainty component exceeded 5 arcminutes.

5.) The normalized position-match figure of merit was less than 0.4.

6.) A color test was failed by a multi-band sighting; the parameter tested was the natural logarithm of the ratio of the flux at 12 μm to that at 25 μm, or the similar ratio for 25 μm to 60 μm, or both, if available; the first was required to lie in the range from -0.75 to +1.0; the second was required to lie in the range from 0.5 to 2.25.

7.) A sighting with only one band containing a detection of an asteroid for which no other acceptable sightings were found had a flux status of less than 5 (fully seconds-confirmed).

Within each sighting, some bands may have been able to contribute to the overall average and others not. An observation in a given band was excluded if any of the following conditions were found.

1.) The observation occurred in band 4 (100 μm).

2.) The flux status in band-2-only (25 μm) sightings was less than 4 (non-seconds-confirmed but possibly due to a failed or noisy detector).

3.) The confusion status word indicated possible confusion at some confirmation level.

4.) The detection correlation coefficient was below threshold (0.94 for 25 μm and 0.90 in the other bands).

5.) The albedo iteration did not converge, or the value fell outside the range 0.01 to 0.90.

6.) The albedo was too far from the mean of the other albedos (Chauvenet's criterion was used for this purpose).

A more detailed discussion of the data filtering and how it is believed to have affected completeness and reliability is contained in Chapter 6.

When all observations had been identified as usable or unusable, the averaging procedures were carried out. The sample mean for the set of usable measurements was obtained by summing the albedo and the square of the albedo over all usable measurements, while counting them. The mean was computed as an unweighted arithmetic mean at this point, since the samples could come from different populations (including noise), making inverse-variance weights untrustworthy. The unbiased estimate of the population variance is

$$\sigma^2_{pHp} = \frac{N}{N-1}\left(\frac{\sum p_H^2}{N} - \left(\frac{\sum p_H}{N}\right)^2\right) \tag{26}$$

where the summations are over the albedos remaining after filtering out ineligible results, and N is the number of measurements contributing to these sums.

The overall average was recomputed by disqualifying observations for which the albedo was different from the mean by more than allowed by Chauvenet's criterion (which chooses a limit in units of the standard deviation σ_{pHs} appropriate for the number of samples). Again, an unweighted mean was computed, and an estimate of the uncertainty in the mean was obtained by dividing the root-sum-squared *a priori* measurement errors by the number of samples averaged. This variance is denoted σ_{pHs}^2. The mean value for the albedo was the final answer for that parameter, and is denoted $\langle p_H \rangle$.

Once the final value for the albedo was known, all the usable sightings were examined once again to see if any had all of their albedo estimates above or all below this final value. This was done to investigate whether light-curve (or other systematic) effects were present in the observations. When such sightings were found, the in-sighting mean albedo $\langle p_{Hs} \rangle$ and its reduced variance σ_{pHs}^2 contributed a term of the form

$$\frac{(\langle p_H \rangle - \langle p_{Hs} \rangle)^2}{\sigma^2_{pHs}} \tag{27}$$

to a summation of such terms over all such sightings. This summation constitutes a sample of a chi-square random variable (under the hypothesis that the observations were all made under identical conditions with the same true value $\langle p_H \rangle$ being measured with associated measurement error) with N degrees of freedom, where N is the number of sightings contributing to the summation.

The probability $P(\chi^2)$ associated with this chi-square value is the fraction of all chi-square random variables with the same number of degrees of freedom which have the same value as the observed sample or less. If the observed chi-square value was rather large, $P(\chi^2)$ would be near unity; this should happen if statistically significant sighting-to-sighting discrepancies in the albedo occur, and a noticeable light curve should emerge in this way (other effects could also cause it, however). If the chi-square value was mediocre, then $P(\chi^2)$ would be approximately 0.5. If the chi-square value was rather small, it probably meant that the *a priori* uncertainties were overestimated, and the value of $P(\chi^2)$ would lie between zero and 0.5.

Since the effect of a significant light curve would be to put $P(\chi^2)$ between 0.5 and unity, a variable F_{LC} (parameter PLC in final products number 102 and 103) was derived from

$$F_{LC} = 2\,P(\chi^2) - 1 \tag{28}$$

$$\textit{If } F_{LC} < 0.1 \textit{ then } F_{LC} = 0.1 \tag{29}$$

and we loosely refer to F_{LC} as the probability that a light curve effect is present in the data. F_{LC} was then used to set the uncertainty of $\langle p_V \rangle$ according to

$$\sigma_{\langle p_V \rangle} = \sqrt{F_{LC}\,\sigma^2_{pHp} + (1 - F_{LC})\,\sigma^2_{pH}} \tag{30}$$

The value of F_{LC} was not permitted to go below 0.1 as a safety measure. The equation immediately above causes the uncertainty in $\langle p_V \rangle$ to approach the reduced standard deviation σ_{pH} if it appears that the measurements are all quite consistent with each other (which would rule out significant light curve effects), and to approach the

population standard deviation σ_{pap} in the limit that the measurements are significantly inconsistent with each other.

Finally, the diameter was computed from $<p_H>$ via

$$D = 10^{(3.1236 - 0.2H - 0.5\log<p_H>)} \tag{31}$$

The uncertainty in the diameter is set so that its relative uncertainty is half that of the albedo. The AStatW status word bits 12+i are set on if band i (i = 1, 2, 3) contributed to the final average albedo; this is done for each sighting.

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Chapter 5

IRAS MINOR PLANET SURVEY ASTEROID ASSOCIATIONS

Glenn J. Veeder and Edward F. Tedesco

This chapter discusses the characteristics and acceptance criteria of accepted sightings, rejected candidates, and missed predictions.

The polar orbit of the Infrared Astronomical Satellite (IRAS) was chosen so that it would precess over the entire sky during its mission from February to November 1983. The IRAS lune scan strategy provided redundant sky coverage, especially at high latitudes near the ecliptic poles. However, due to many complicated constraints, IRAS sky coverage was not absolutely uniform. During the startup of the IRAS mission after engineering tests, repeated scans near 60° ecliptic longitude (during SOP 29 to 57) were taken for an initial "mini-survey". Near the end of the IRAS mission, third HCON coverage was obtained from about 60° to 155° ecliptic longitude. After IRAS ran out of cryogen, two gaps of sky approximately 5° wide near 160° and 340° ecliptic longitude were left uncovered. Moreover, IRAS did not operate in a survey mode continuously. Other observations and spacecraft maneuvers were interspersed among survey scans throughout the IRAS mission. In addition, the ADAS asteroid processor was not operative for the last two SOPs of the IRAS mission. Therefore, IRAS Minor Planet Survey (IMPS) asteroid data are generated from discrete intervals within the IRAS data stream from SOP 29 to 598, inclusive.

5.1 Accepted Sightings

Accepted sightings are analyzed in the IMPS Accepted Sightings Analysis chapter (Chapter 6).

5.1.1 Normalized Detection Rate

Figure 2 displays a histogram of the IRAS asteroid detection rate for all final accepted IMPS asteroid sightings as a function of ecliptic longitude. There are a total of 8,210 accepted sightings of 2,004 asteroids. The ordinate of this figure is normalized by the

number of IRAS survey mode scans made across the ecliptic plane in each longitude bin. The IRAS asteroid detection rate during its survey mode was relatively uniform in ecliptic longitude (as well as in time). There is an increase (by about a factor of 2) in the number of accepted asteroid sightings per degree within the mini-survey near an ecliptic longitude of 60° that is balanced by the number of repeated scans in this interval. Accepted asteroid sightings are not strongly correlated with galactic coordinates.

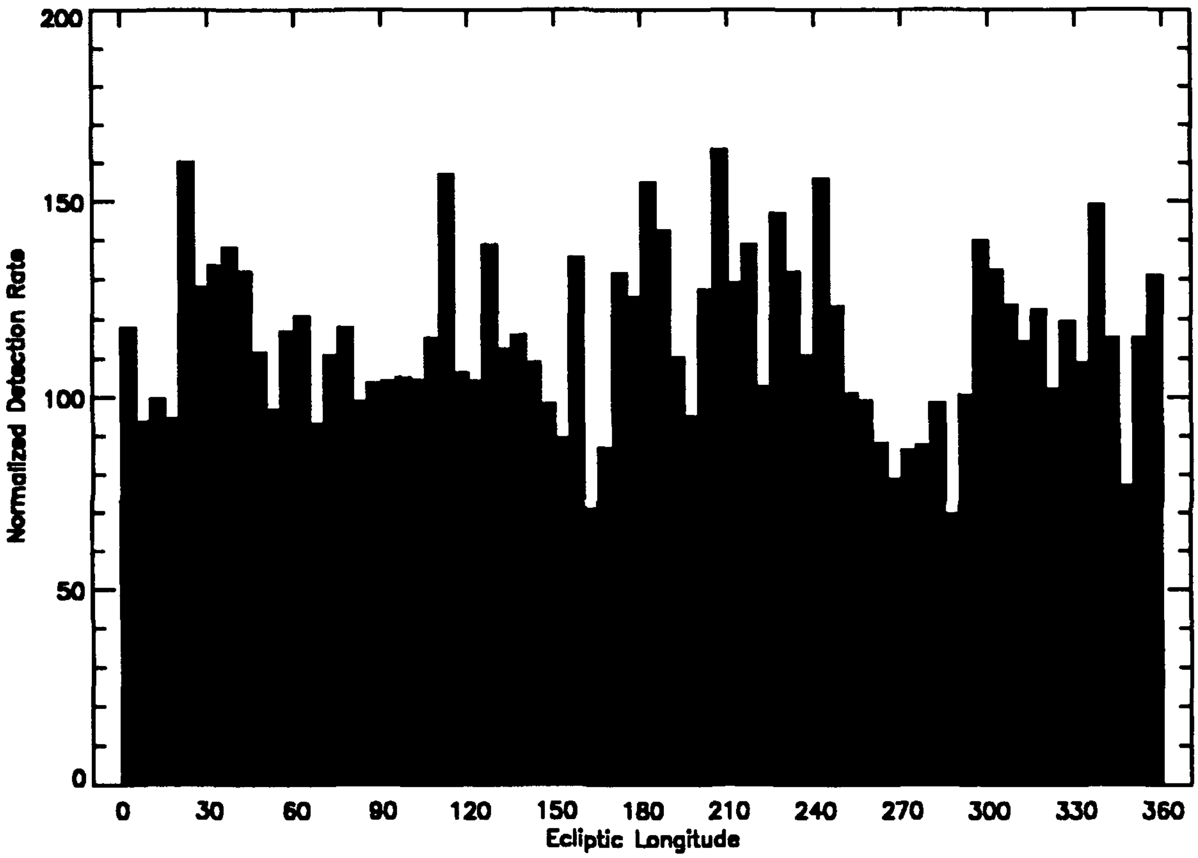

Figure 2. Ecliptic longitude histogram of all 8,210 final accepted IMPS asteroid sightings. The ordinate is equivalent to the asteroid detection rate normalized by the number of IRAS scans made across the ecliptic during its survey mode.

5.1.2 Ecliptic Sky

Figures 3a, 3b and 3c plot the ecliptic latitude against longitude in degrees for the brightest and faintest accepted sightings of asteroids with more than one final IMPS accepted association and also the final accepted IMPS singleton asteroids. The asteroid detection sensitivity of the IMPS system is relatively independent of ecliptic longitude. The zodiacal background decreases by a factor of about two from the plane of the ecliptic to near the poles; but the input orbital elements are strongly biased towards the ecliptic plane. There are two gaps in the IRAS scan coverage near 160° and 340° longitude which occurred when IRAS ran out of cryogen at the end of its mission. The galactic center is near ecliptic longitude 270°. This area includes many associations confused with background sources and therefore rejected (*cf.*, Figs. 13 and 14). The apparent increased density in ecliptic longitude range 60° – 155° is due to a subtle geometric effect connected with the way in which HCON three was conducted near the end of the mission together with the orbital motion of the asteroids. The distribution of IMPS asteroid associations on the sky shows no additional obviously spurious structure. See §8.1 for a more detailed discussion.

Figure 3d shows an ecliptic sky plot of the accepted sightings of IMPS asteroids with more than ten accepted sightings. These tracks highlight hours confirmed (HCON) observations of asteroids from successive orbits. Several short tracks with multiple observations result within the initial IRAS mini-survey which repeated scans during SOP 29 - 57 over a limited area near 60° and 240° ecliptic longitude (*cf.*, Rowan-Robinson *et al.*, 1984 and also the *IRAS Explanatory Supplement, 1988*). IRAS discovered the fast moving asteroid 3200 Phaethon approaching close to the Earth near the north ecliptic pole from quick look data at PAF (Davies *et al.*, 1984). Its six accepted sightings are near 240° ecliptic longitude and 85° ecliptic latitude.

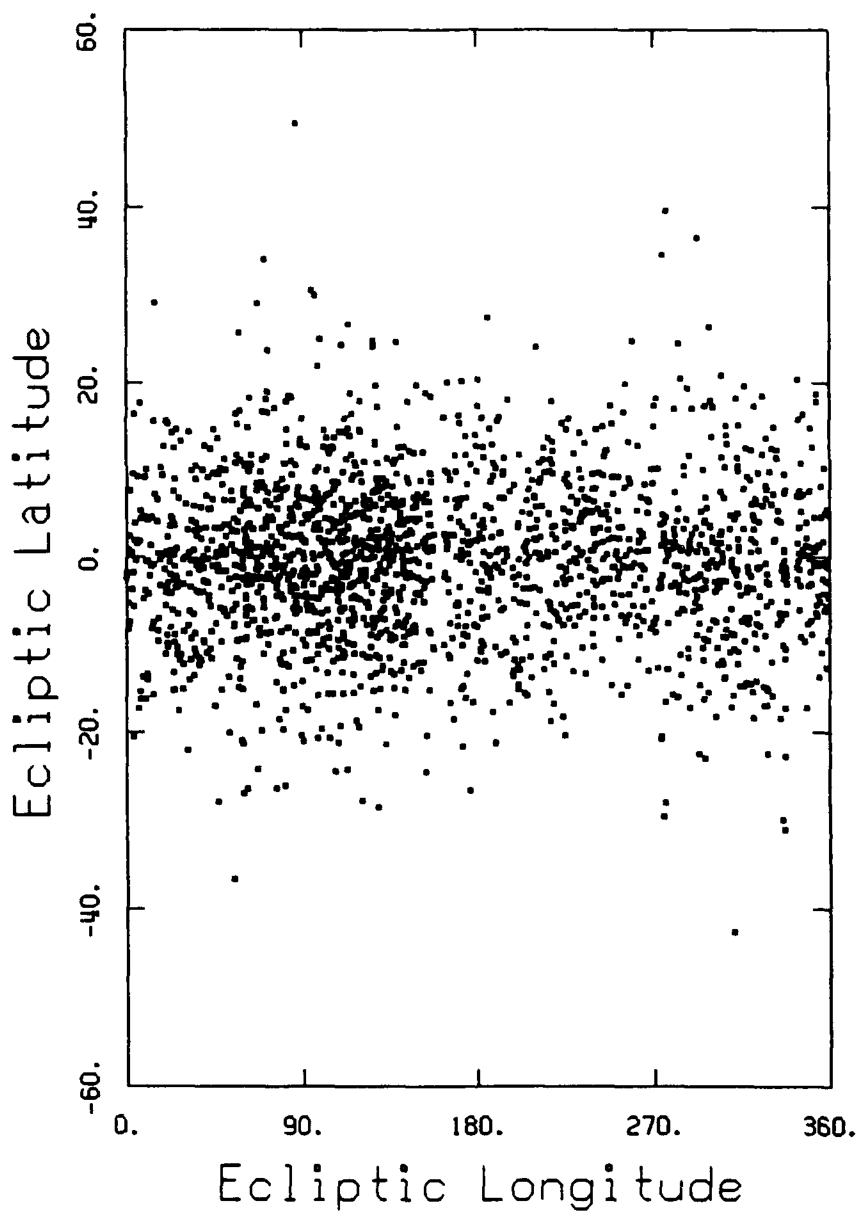

Figure 3a. Ecliptic latitude vs. longitude in degrees sky plot for the brightest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. There are two gaps in the IRAS scan coverage near 160° and 340° longitude (*cf.* Figs. 3b, 3c and 3d).

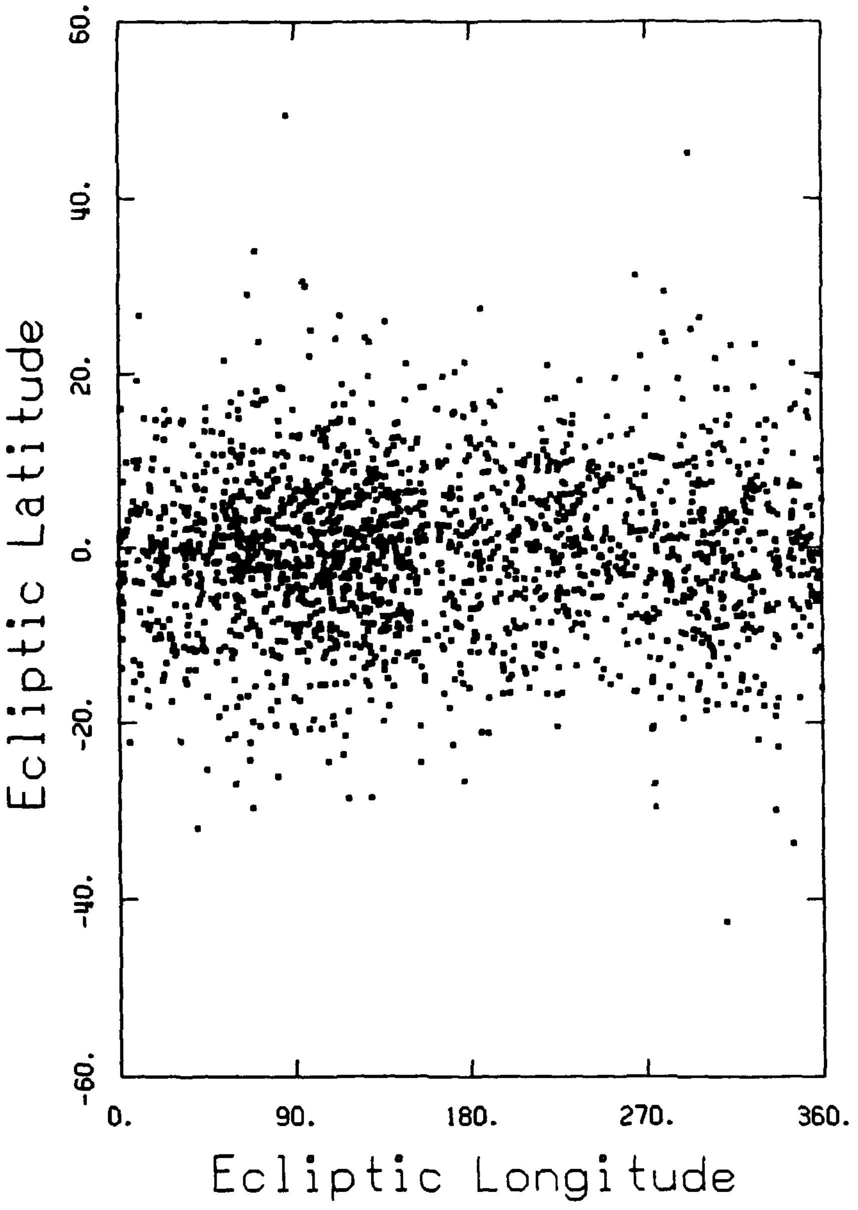

Figure 3b. Ecliptic latitude vs. longitude in degrees sky plot for the faintest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. There are two gaps in the IRAS scan coverage near 160° and 340° longitude (*cf.* Figs. 3a, 3c and 3d).

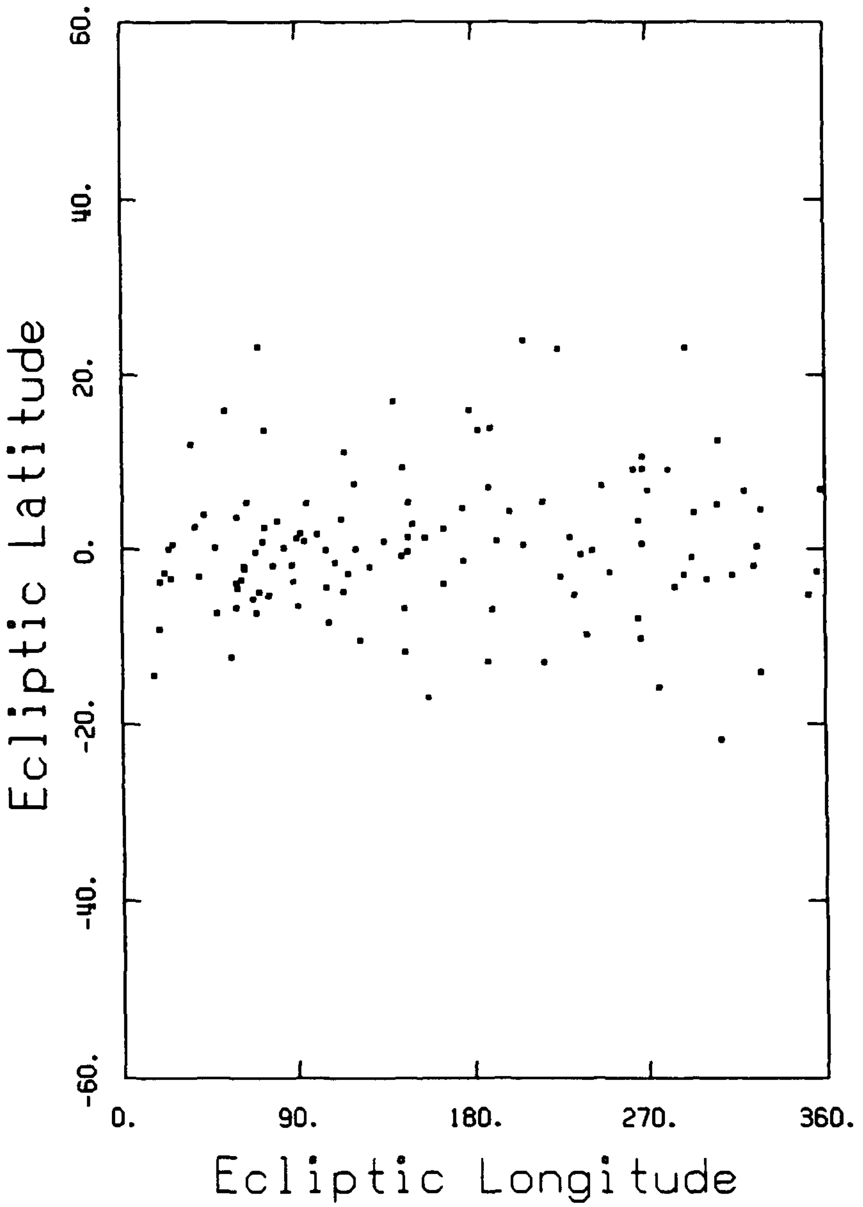

Figure 3c.Ecliptic latitude vs. longitude in degrees sky plot for each final accepted IMPS singleton asteroid (with only one accepted observation at one wavelength within a single accepted sighting). There are two gaps in the IRAS scan coverage near 160° and 340° longitude (*cf.* Figs. 3a, 3b and 3d).

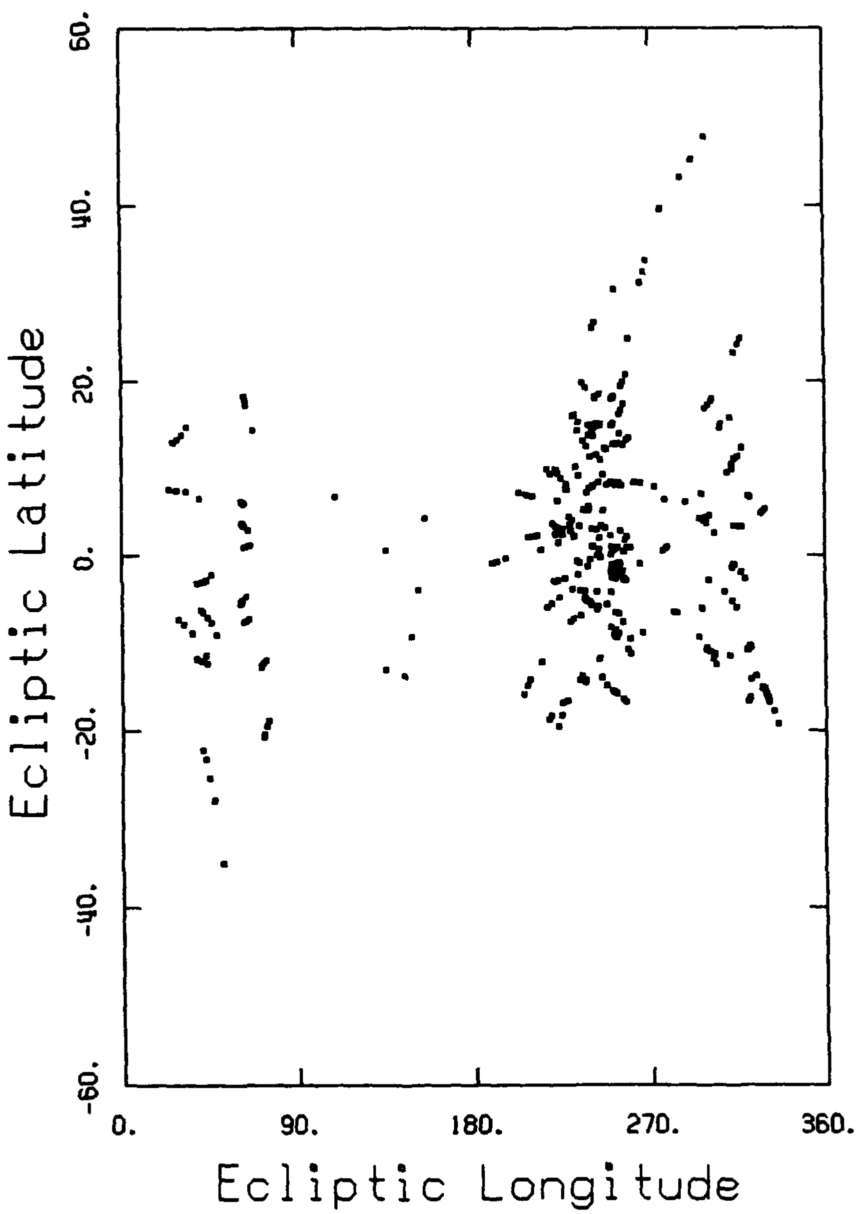

Figure 3d. Ecliptic latitude vs. longitude in degrees sky plot for all accepted sightings of each final accepted IMPS asteroid with more than ten accepted sightings. There are two gaps in IRAS scan coverage near 160° and 340° longitude (*cf.* Figs. 3a, 3b and 3c).

5.1.3 Polar Projection

Figures 4a and 4b plot polar projections onto the ecliptic plane for the brightest accepted sighting of each final accepted IMPS asteroid (including singletons). Zero degrees ecliptic longitude is towards the top of these plots. IRAS had sufficient sensitivity to detect asteroids throughout the main belt and Jupiter Trojan clouds. IRAS also observed a few Apollo and Amor asteroids near the Earth. IRAS scanned ecliptic longitudes 60° through 155° during its third hours-confirming coverage. Since the IMPS detection rate of asteroids is relatively constant, this results in more asteroid associations on the right hand side of these diagrams. At the epoch of the 1983 IRAS mission, Jupiter's ecliptic longitude changed from ~210° to ~260° over the course of the IRAS mission. Thus, in these plots it would be located in the lower left quadrant between the preceding and following Trojan asteroids which are also near a heliocentric distance of 5 AU. Low albedo asteroids dominate beyond the main belt. Moderate and high albedo asteroids are relatively more abundant in the inner main belt region where they account for slightly more than half of the largest asteroids.

5.1.4 Rectangular Projection

Figures 5a and 5b plot rectangular cross section projections perpendicular to the ecliptic plane; that is, distance (AU) from the plane (with north positive) against the heliocentric distance (AU) projected onto the plane for the brightest accepted sighting of each final accepted asteroid (including singletons). Trojan asteroids tend to have high orbital inclinations and thus scatter up to about 2 AU above and below the ecliptic plane at a distance of around 5 AU. Jupiter itself would plot at 5,0 on this diagram. Again, low albedo asteroids dominate beyond the main belt. Moderate and high albedo asteroids are relatively more abundant in the inner main belt region where they account for slightly more than half of the largest asteroids. IRAS discovered the parent body of the Geminid meteor stream 3200 Phaethon near the north ecliptic pole at a distance of about one AU from Earth (and thus also above the ecliptic plane). The Apollo asteroid 2201 Oljato is projected nearest the orbit of the Earth (at 1,0).

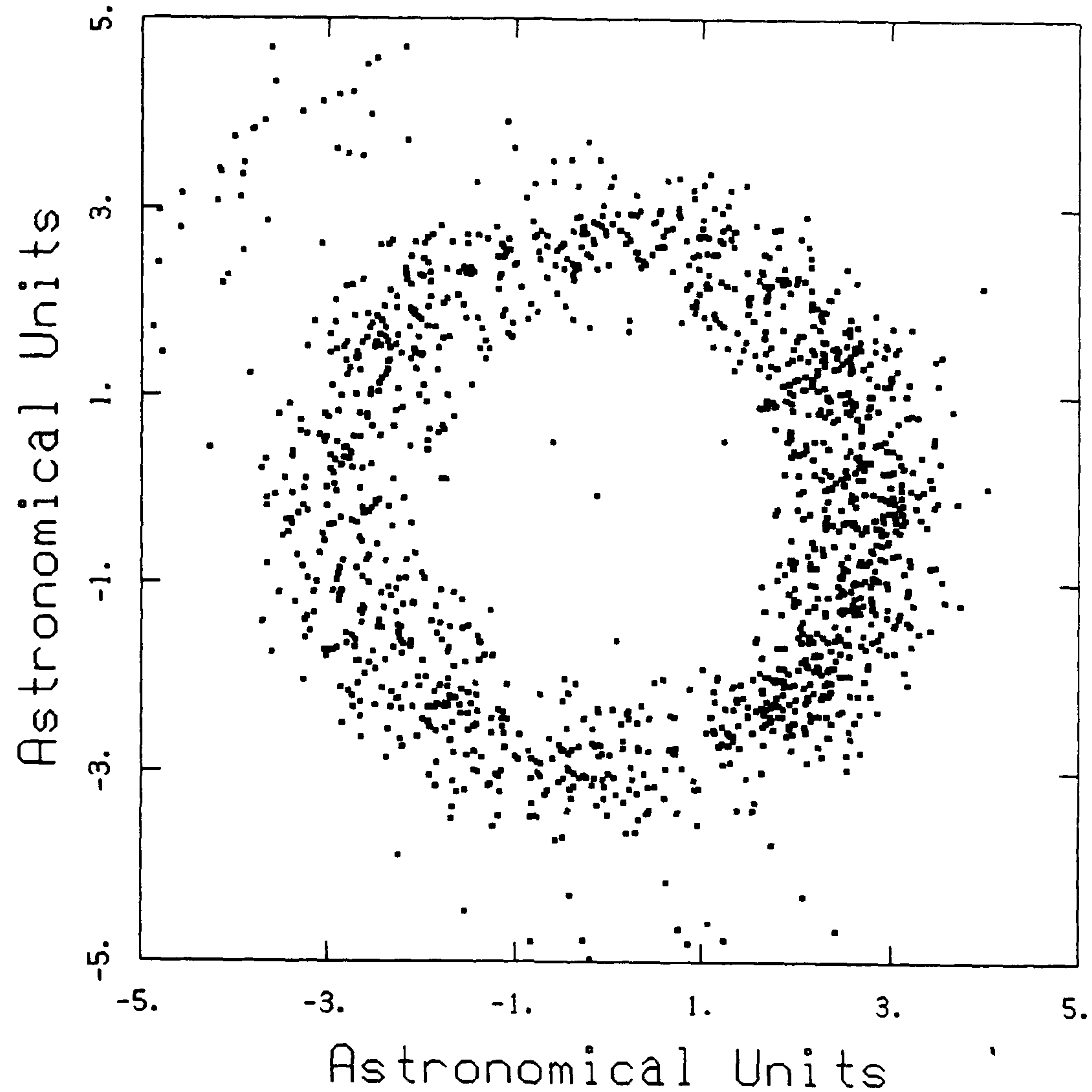

Figure 4a. Polar projection onto the ecliptic plane for the brightest accepted sighting (including singletons) of each final accepted asteroid. Data for IMPS asteroids with a model geometric visual albedo of less than 0.1 are plotted. Zero degrees ecliptic longitude is towards the top of this plot. During the 1983 IRAS mission, Jupiter was in the lower left quadrant near an ecliptic longitude of ~250 degrees between the preceding and following Trojan asteroids which are also near a heliocentric distance of 5 AU. Low albedo asteroids dominate beyond the main belt (*cf.*, Fig. 4b).

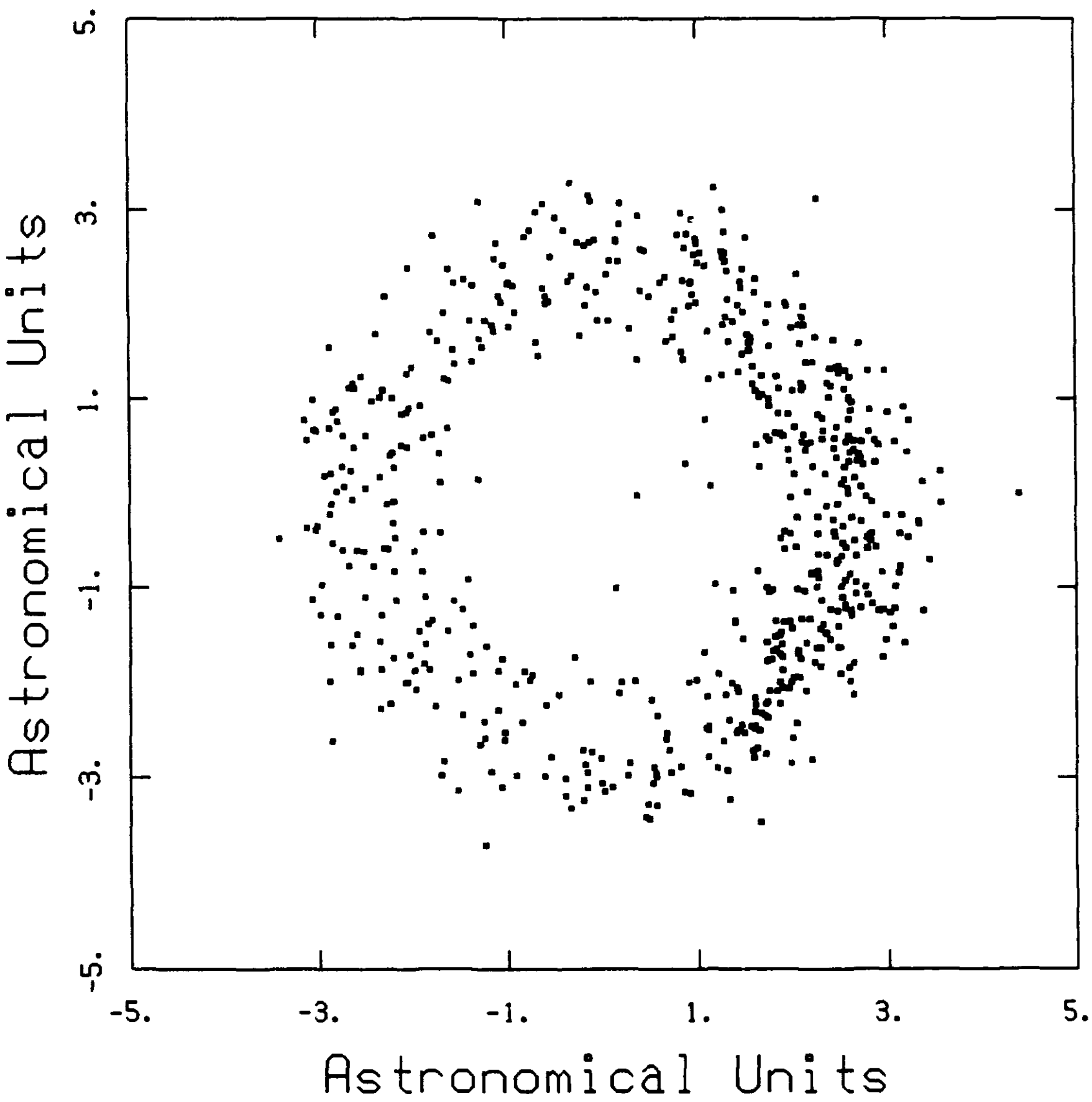

Figure 4b. Polar projection onto the ecliptic plane for the brightest accepted sighting (including singletons) of each final accepted asteroid. Data for IMPS asteroids with a model geometric visual albedo of greater than 0.1 are plotted. Zero degrees ecliptic longitude is towards the top of this plot. High albedo asteroids are rare beyond the main belt (*cf.*, Fig. 4a).

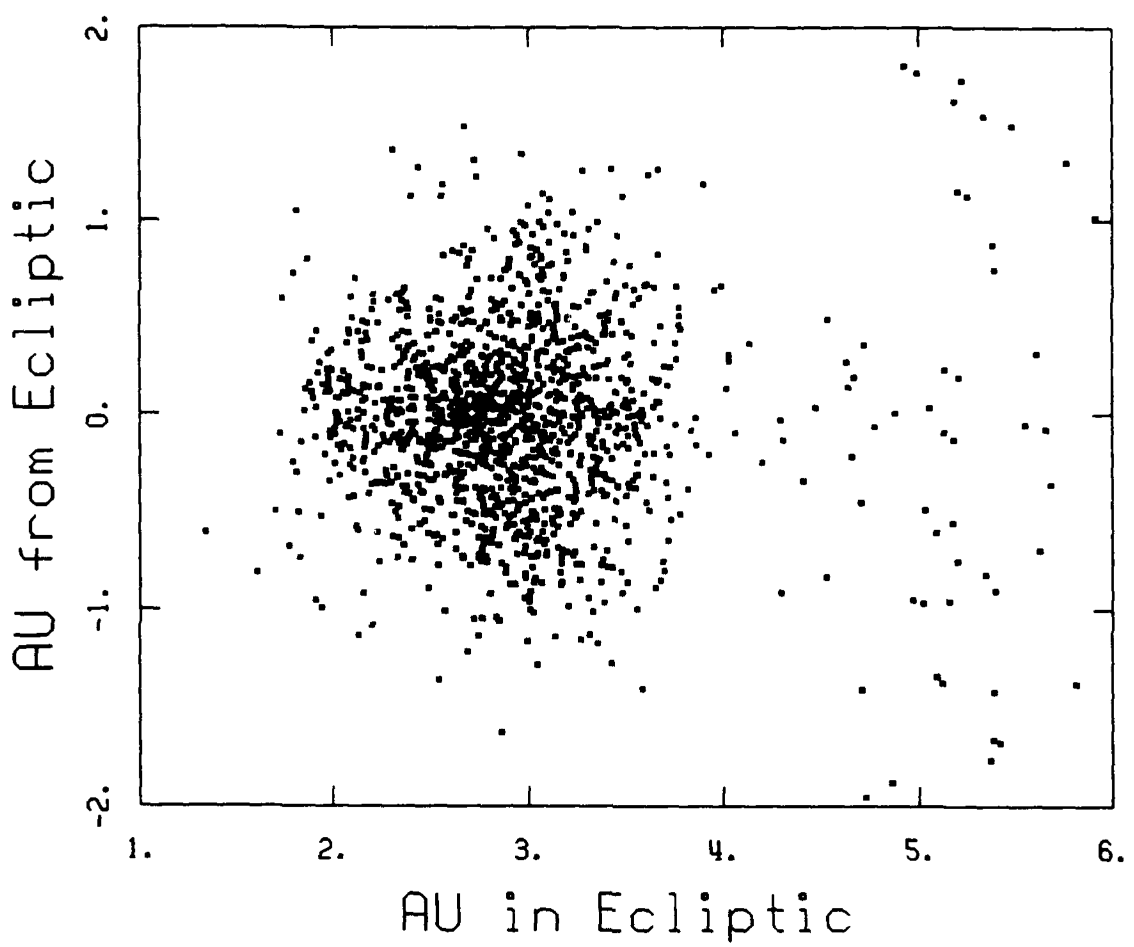

Figure 5a. Rectangular cross section projection perpendicular to the ecliptic plane for the brightest accepted sighting (including singletons) of each final accepted asteroid. Data for IMPS asteroids with a model geometric visual albedo of less than a 0.1 are plotted. The ordinate is the distance in AU from the ecliptic plane and has north towards the top. The abscissa is the projection of the heliocentric distance in AU onto the ecliptic plane. Trojan asteroids near a heliocentric distance of 5 AU tend to have high orbital inclinations and thus scatter above and below the ecliptic plane. Low albedo asteroids dominate beyond the main belt (*cf.*, Fig. 5b).

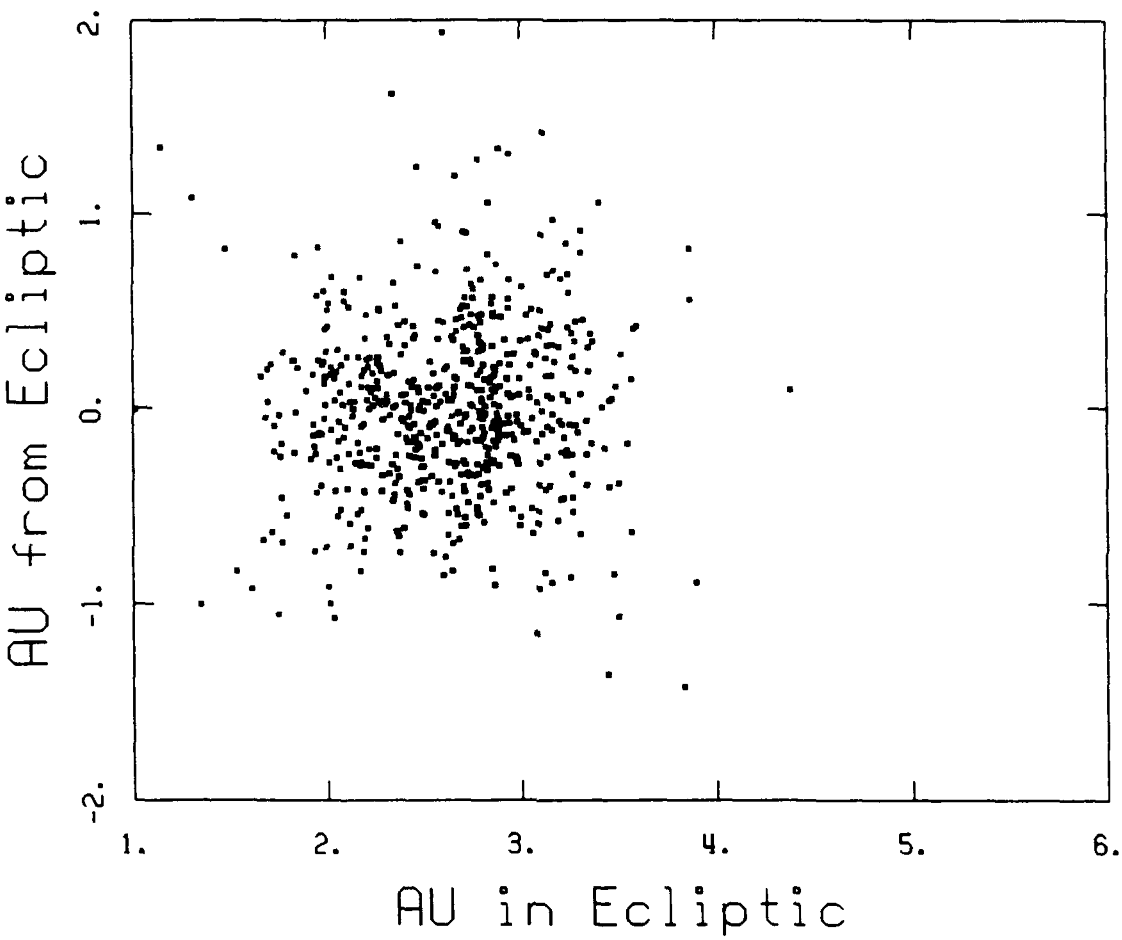

Figure 5b. Rectangular cross section projection perpendicular to the ecliptic plane for the brightest accepted sighting (including singletons) of each final accepted asteroid. Data for IMPS asteroids with a model geometric visual albedo of greater than a 0.1 are plotted. The ordinate is the distance in AU from the ecliptic plane and has north towards the top. The abscissa is the projection of the heliocentric distance in AU onto the ecliptic plane. High albedo asteroids are rare beyond the main belt (*cf.*, Fig. 5a).

5.1.5 Phase Angle

Figure 6 shows the phase angle in degrees against heliocentric distance in AU for the brightest accepted sighting of each final accepted IMPS asteroid (including singletons). IRAS observations of Trojan asteroids are typically near a phase angle of 10°. Space craft constraints required for avoidance of the Sun, Moon and Earth result in a lack of coverage near asteroid oppositions. Observations of only a few inner belt and Apollo and Amor asteroids are at phase angles larger than 30°. For example, IRAS observed the Apollo asteroids 2201 Oljato at a phase angle of ~85° and 3200 Phaethon at ~75°. The reductions of these few high phase angle observations may involve an additional uncertainty in thermal modeling (Matson, 1971; Lebofsky *et al.*, 1986a,b; Lebofsky and Spencer, 1989).

5.1.6 Observed/Predicted Flux Density

Figures 7a and 7b show the $\log_{10}$ of observed/predicted flux density plotted against the $\log_{10}$ of predicted flux density (Jansky) at 25 μm for the brightest accepted sighting of each asteroid with more than one final IMPS accepted association and also the final accepted IMPS singleton asteroids. Some of the difference between the observations and predictions is due to the asteroid lightcurves and variations with aspect angle. The scatter for asteroids with multiple sightings also relates to the photometric accuracy of IRAS observations (*cf.*, Fig. 25). IRAS sightings of an asteroid are likely to have significantly different geometry than ground-based visual observations. The width of the distribution around a value of unity increases slightly at low flux density (and thus also low SNR). Additional uncertainty is introduced by the lack of reliable visual magnitudes for many (especially fainter) asteroids. The tail of the distribution towards the lower right in this diagram results from the assigned initial default visual geometric albedo (*i.e.*, 0.01 which is near the average mode of the IMPS sample) for those asteroids with no previous data which in fact turn out to have higher derived albedos. Many singletons fall into this latter category.

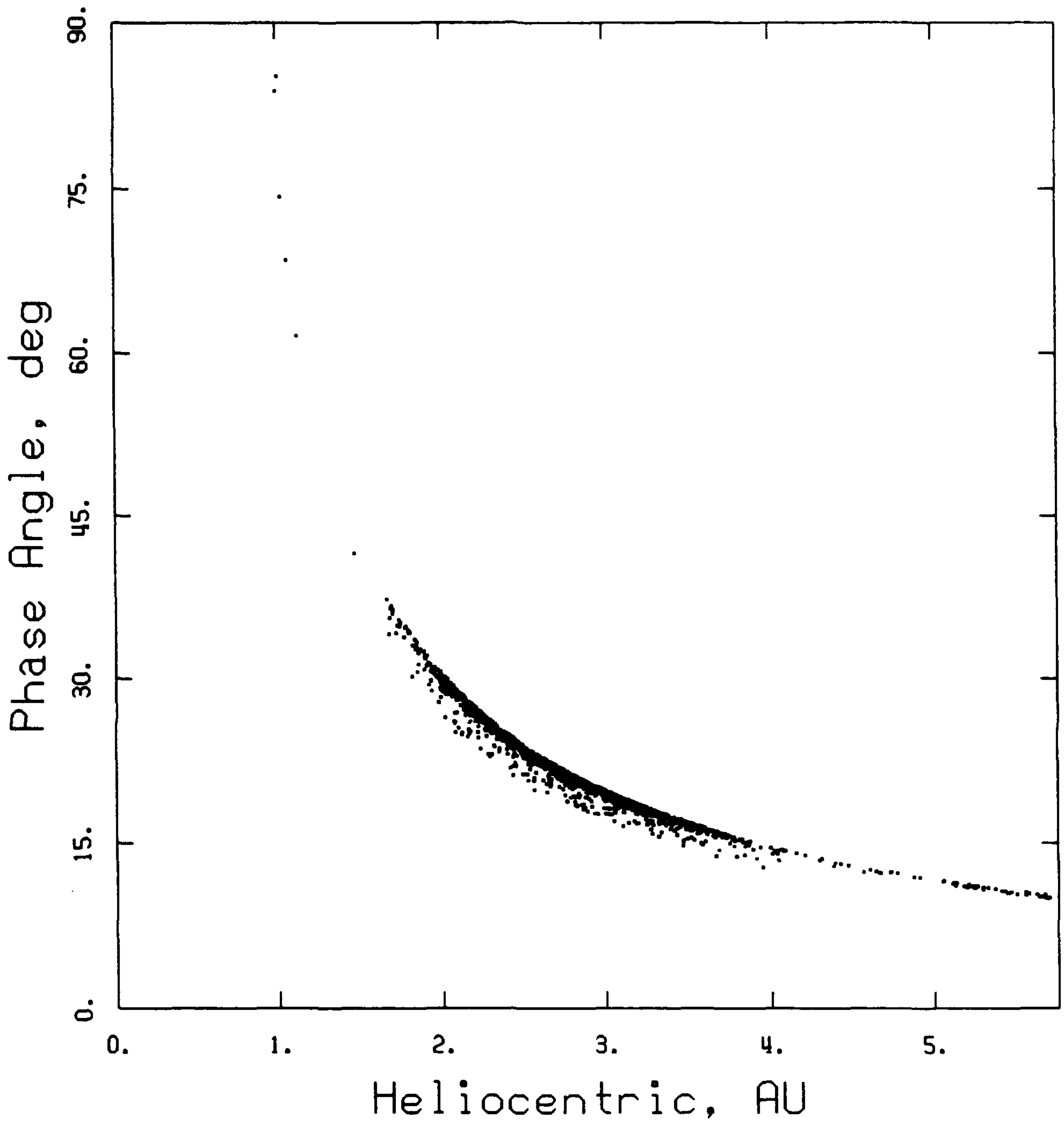

Figure 6. Phase angle in degrees vs. heliocentric distance in AU for the brightest accepted sighting (including singletons) of each final accepted IMPS asteroid. IRAS observations of Trojan asteroids are typically near a phase angle of 10°. Observations of only a few inner belt asteroids are at phase angles larger than 30°.

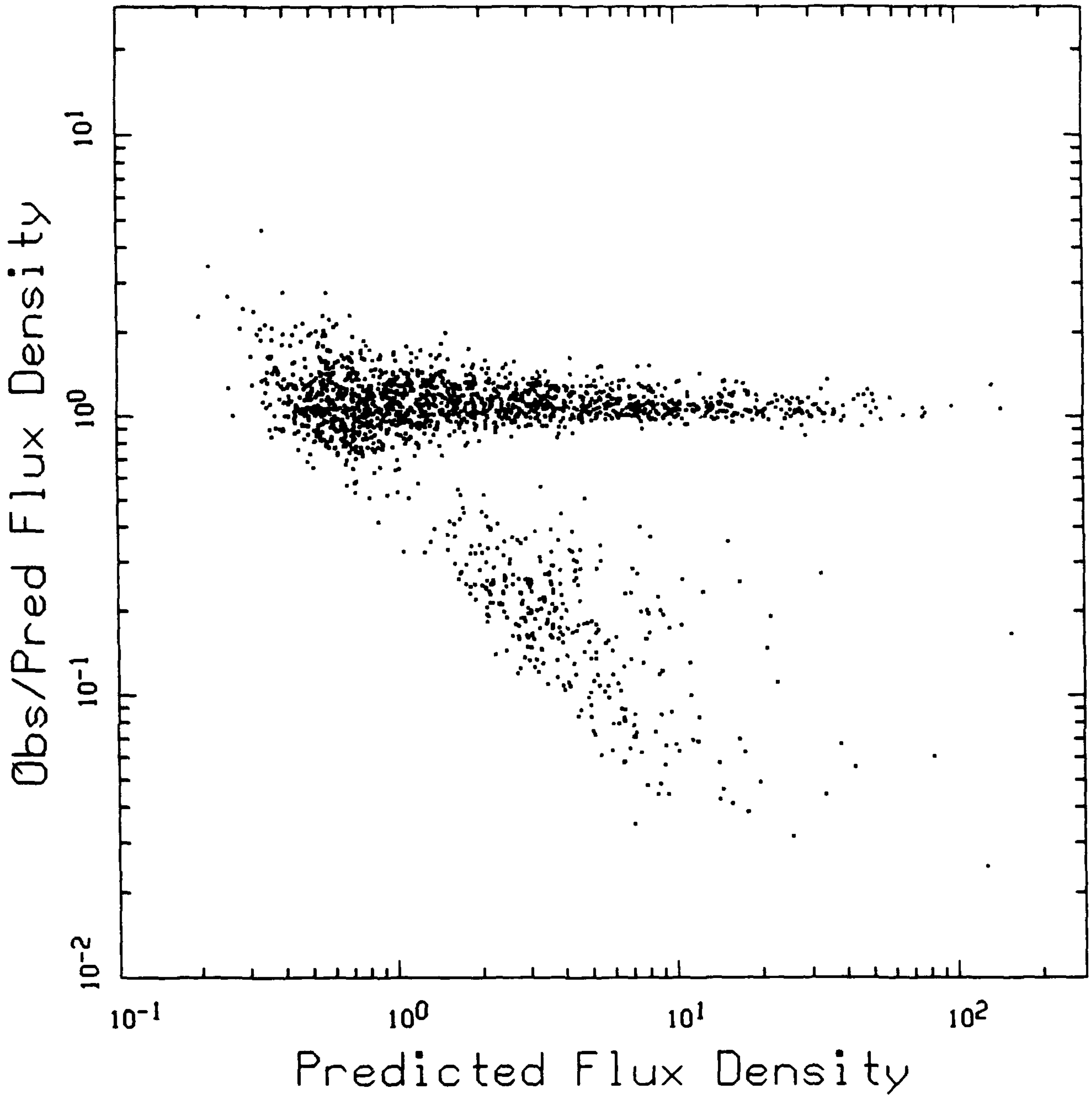

Figure 7a. Log_{10} of observed/predicted flux density vs. log_{10} of predicted flux density in Jansky for the brightest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. The lower tail in this distribution results from the assigned initial default (0.01) visual geometric albedo for each asteroid with no previous data (*cf.*, Fig. 7b).

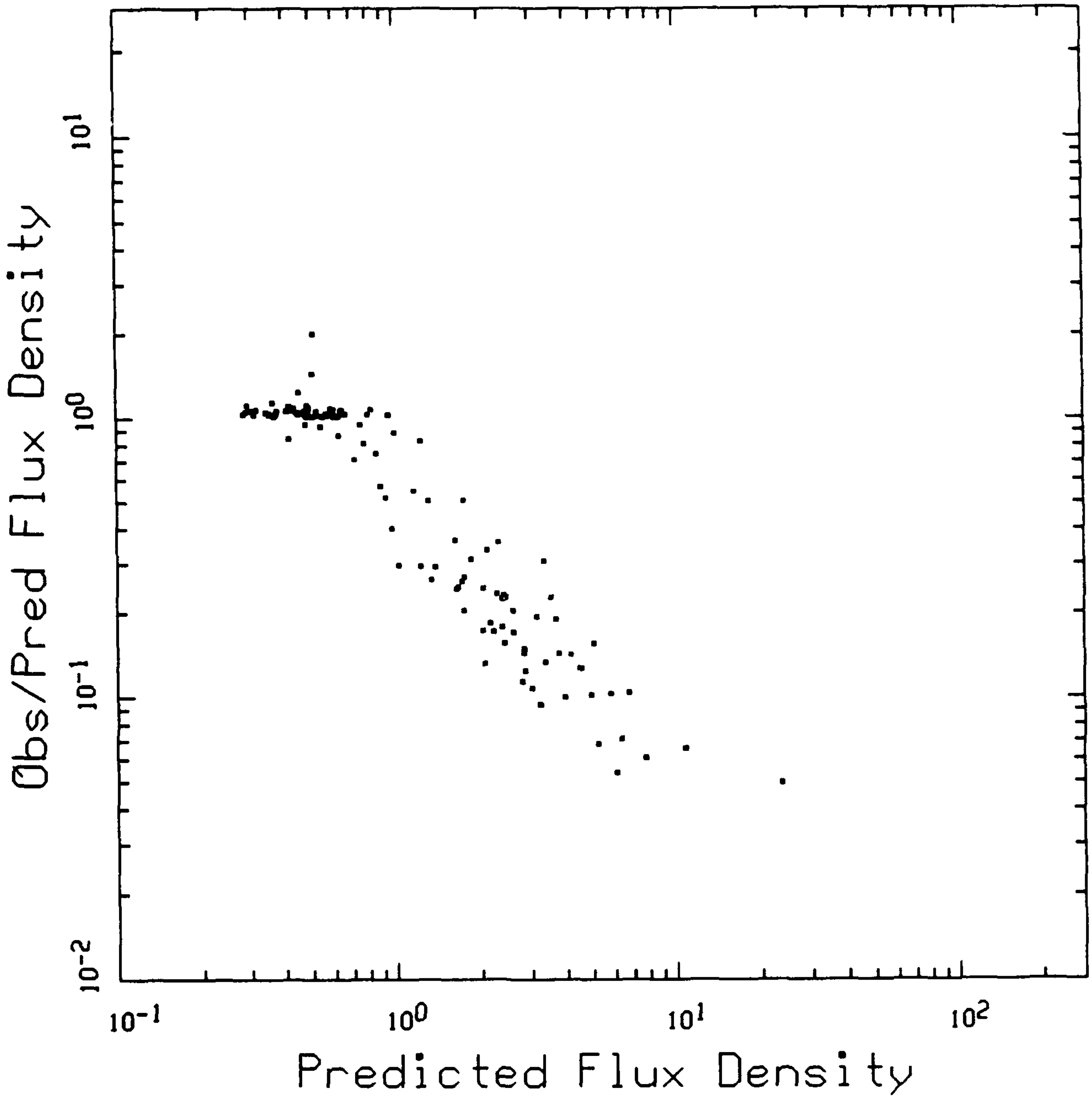

Figure 7b. Log_{10} of observed/predicted flux density vs. $\log_{10}$ of predicted flux density in Jansky for each final accepted IMPS asteroid with only one sighting. Many of these asteroids are assigned an initial default (0.01) visual geometric albedo for lack of previous data (*cf.*, Fig. 7a).

5.1.7 Observed Flux Density

Figure 8 displays a histogram for 7,849 final accepted IMPS asteroid sightings as a function of the $\log_{10}$ 25 μm flux density (Jansky). Note that these are binned on a log scale. As expected, this distribution increases with decreasing flux density down to near the IRAS cutoff (SNR of 3.0) below which it drops off sharply. All candidate asteroid associations are required to have a detection at 25 μm in order to qualify for IMPS processing. Some sightings have observations accepted at 12 or 60 (or both) but rejected at 25 μm (*e.g.*, due to a poor flux status) during processing. Since the infrared spectra of objects with color temperatures of main belt asteroids peak near 25 μm, this requirement is an extremely useful IMPS discriminant against background as well as noise sources. Moreover, asteroids with detections at multiple wavelengths tend to have their best SNR in the 25 μm band. The decrease in the number of asteroid associations accepted at low flux density levels is due to the SNR limit of the IRAS survey and the incompleteness of the available asteroid orbital elements.

5.1.8 Signal to Noise Ratio

Figures 9a, 9b and 9c show the $\log_{10}$ of the (IRAS estimated) SNR plotted against the $\log_{10}$ of the 25 μm flux density (Jansky) for the brightest and faintest accepted sighting of each asteroid with more than one final IMPS accepted association and also the final accepted IMPS singleton asteroids. As expected, SNR and flux density are strongly correlated such that SNR decreases monotonically with decreasing flux density. The 1983 IRAS survey cutoff is 3.0 for estimated SNR, which corresponds to about 0.4 Jansky at 25 μm. SDAS estimated IRAS SNR from a model of the sky background to only one decimal place. Some of the structure in Fig. 9b may result from the combination of different sources of noise. Note that a few sightings are accepted at 12 or 60 (or both) but not at 25 μm. Singletons tend to have both a low flux density and a low SNR.

5.1.9 Infrared Colors

Figure 10 plots the $\log_{10}$ of the flux density color ratio (12 μm to 25 μm) against the heliocentric distance in AU for each final accepted IMPS asteroid sighting with a 25 μm flux density greater than 10 Jansky. Note that no Trojan asteroids are this bright. Asteroids in the inner belt have higher color temperatures than those in the outer belt. Apparent associations with a 12 μm flux density greater than the 25 μm flux density (*i.e.*, $\log_{10}$ of the ratio greater than zero) are rejected by IMPS processing (*cf.*, Chapter 4). This criteria is used to discriminate against confusion with hot background stars (*cf.*, Figs. 11, 12, and 15).

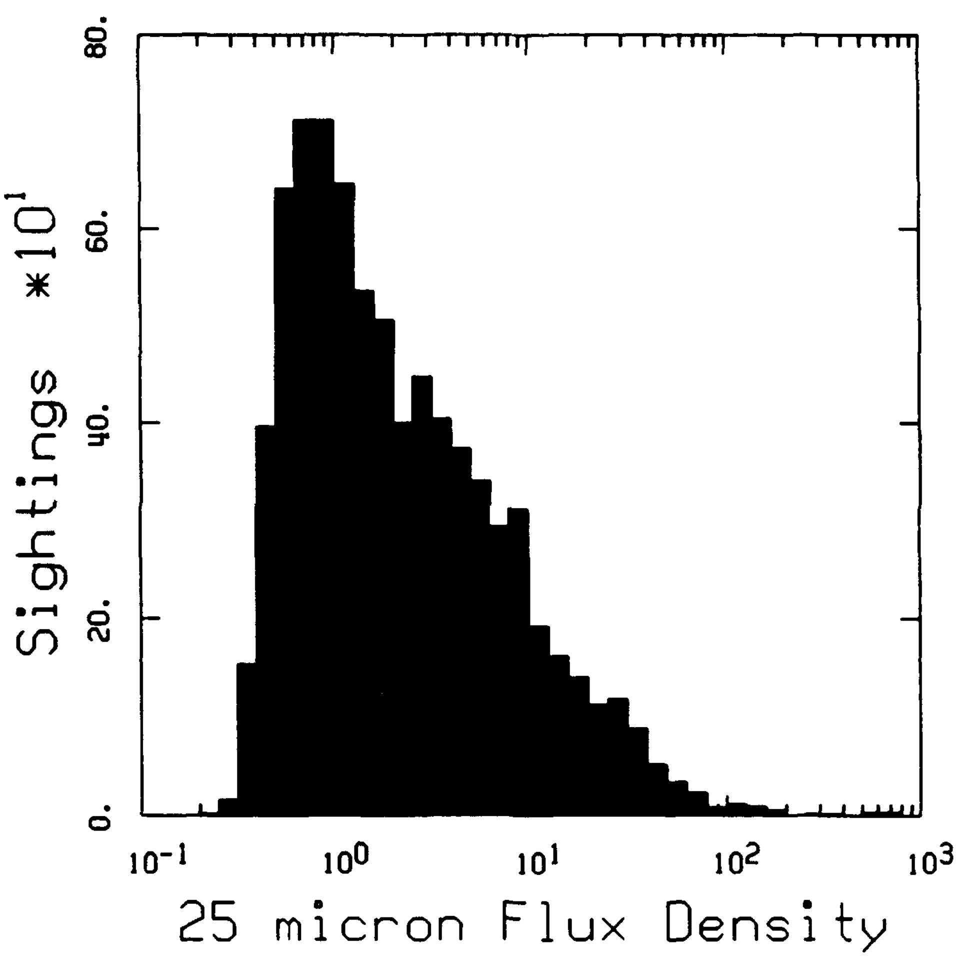

Figure 8. Histogram for 7,849 final accepted IMPS asteroid sightings as a function of $\log_{10}$ 25 µm flux density in Jansky. Some sightings have observations accepted at 12 µm or 60 µm (or both) but rejected at 25 µm.

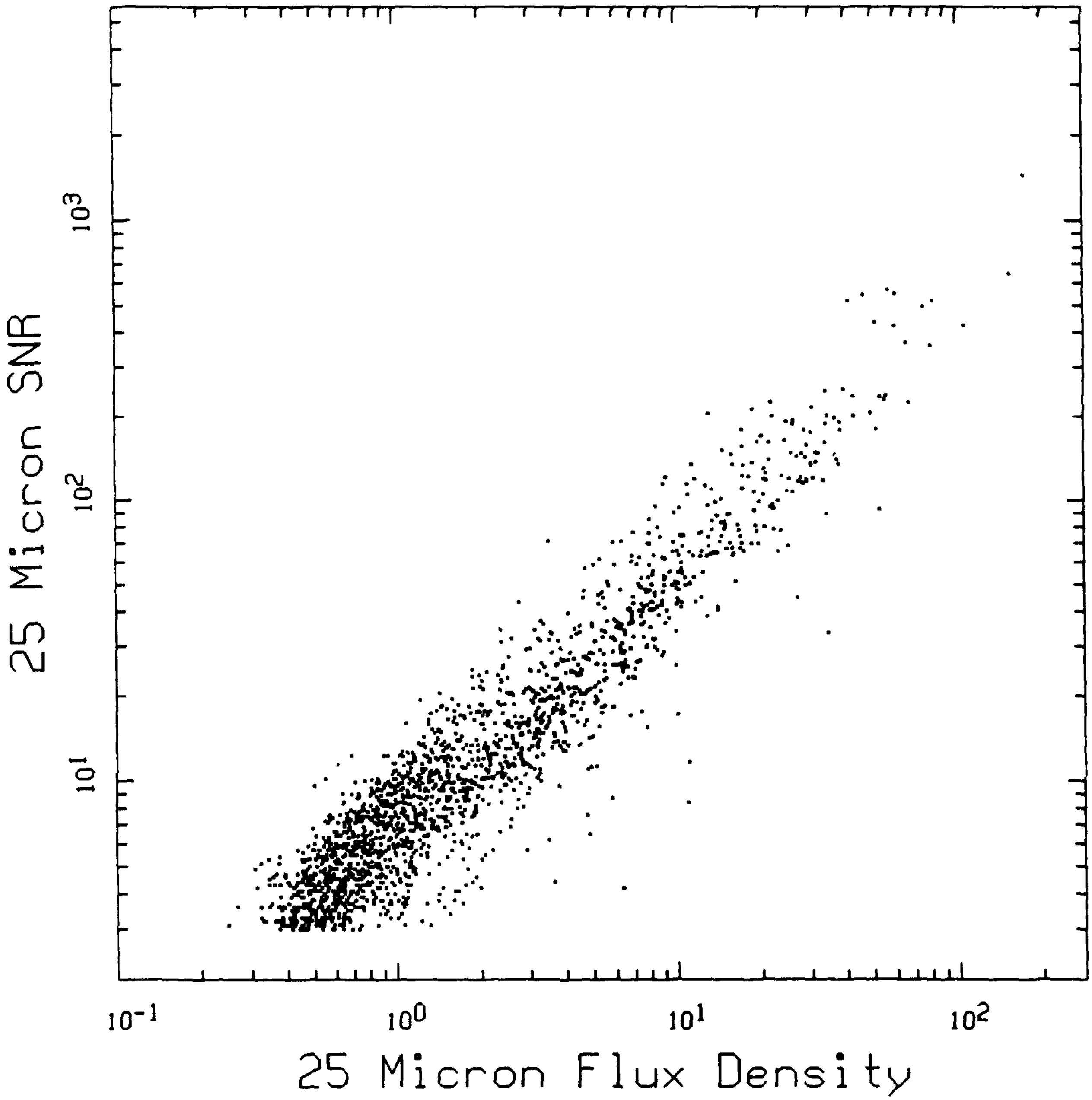

Figure 9a. $\log_{10}$ of the (IRAS estimated) SNR vs. $\log_{10}$ of the 25 μm flux density in Jansky for the brightest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. The IRAS 1983 survey cutoff is 3.0 for estimated SNR at 25 μm. Some sightings are accepted at 12 μm or 60 μm (or both) but not at 25 μm (*cf.*, Figs. 9b and 9c).

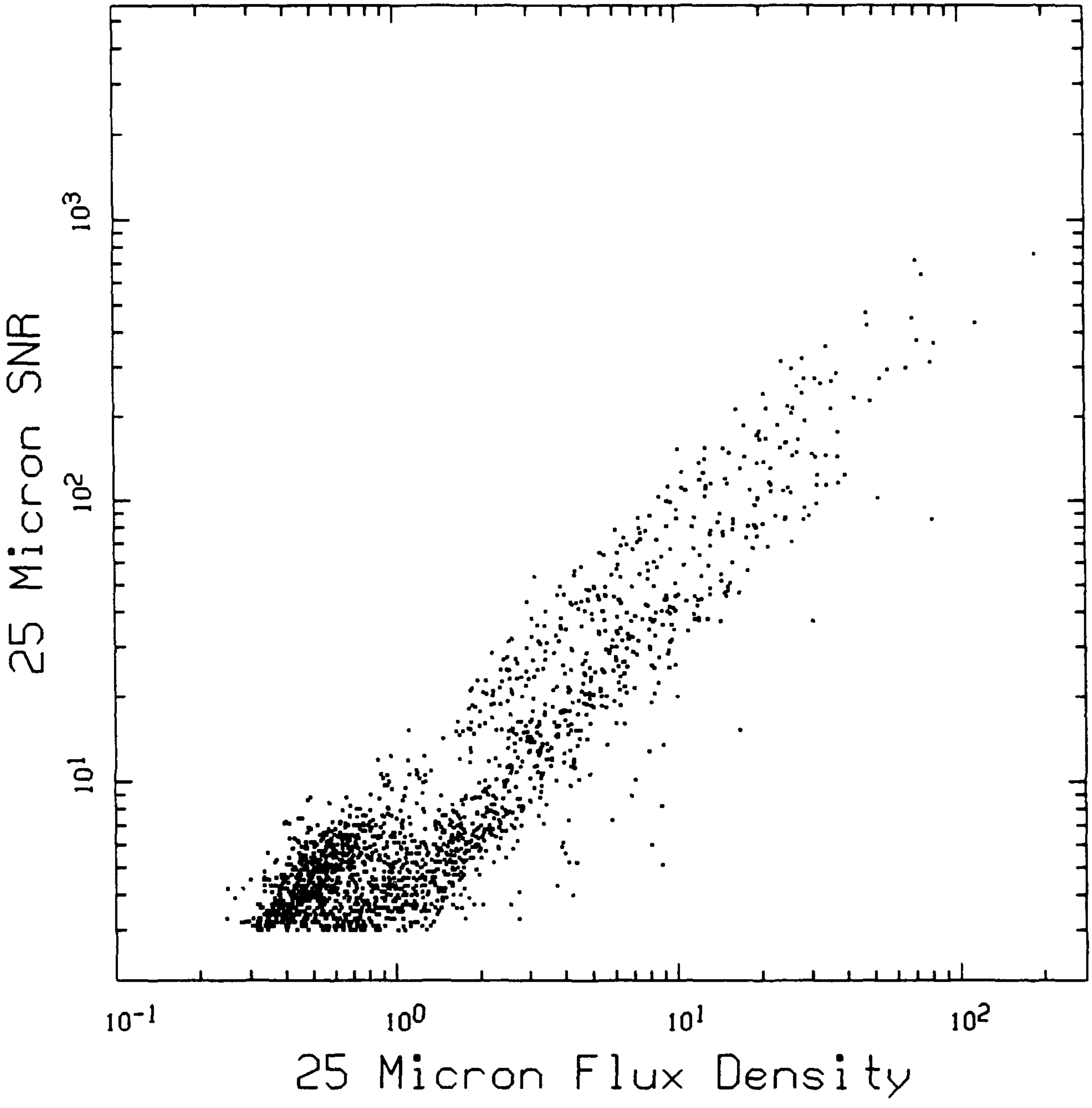

Figure 9b. Log_{10} of the (IRAS estimated) SNR vs. $\log_{10}$ of the 25 µm flux density in Jansky for the faintest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. The IRAS 1983 survey cutoff is 3.0 for estimated SNR at 25 µm. Some sightings are accepted at 12 µm or 60 µm (or both) but not at 25 µm (*cf.*, Figs. 9a and 9c).

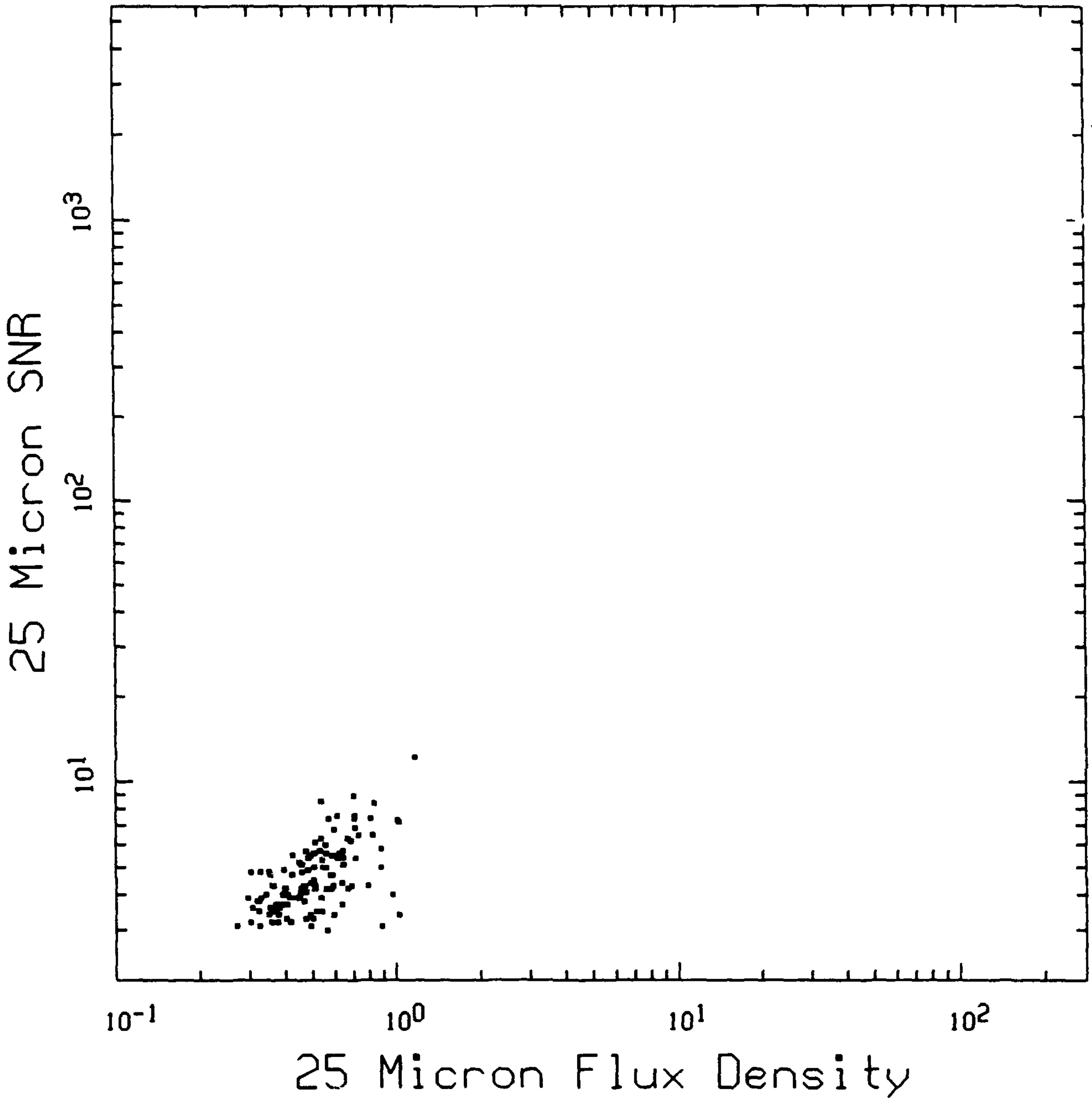

Figure 9c. Log_{10} of the (IRAS estimated) SNR vs. $\log_{10}$ of the 25 μm flux density in Jansky for each final accepted IMPS singleton (with only one accepted observation at one wavelength) asteroid. The IRAS 1983 survey cutoff is 3.0 for estimated SNR at 25 μm. Some sightings are accepted at 12 μm or 60 μm (or both) but not at 25 μm. A singleton tends to have both a low flux density and a low SNR (*cf.* Figs. 9a and 9b).

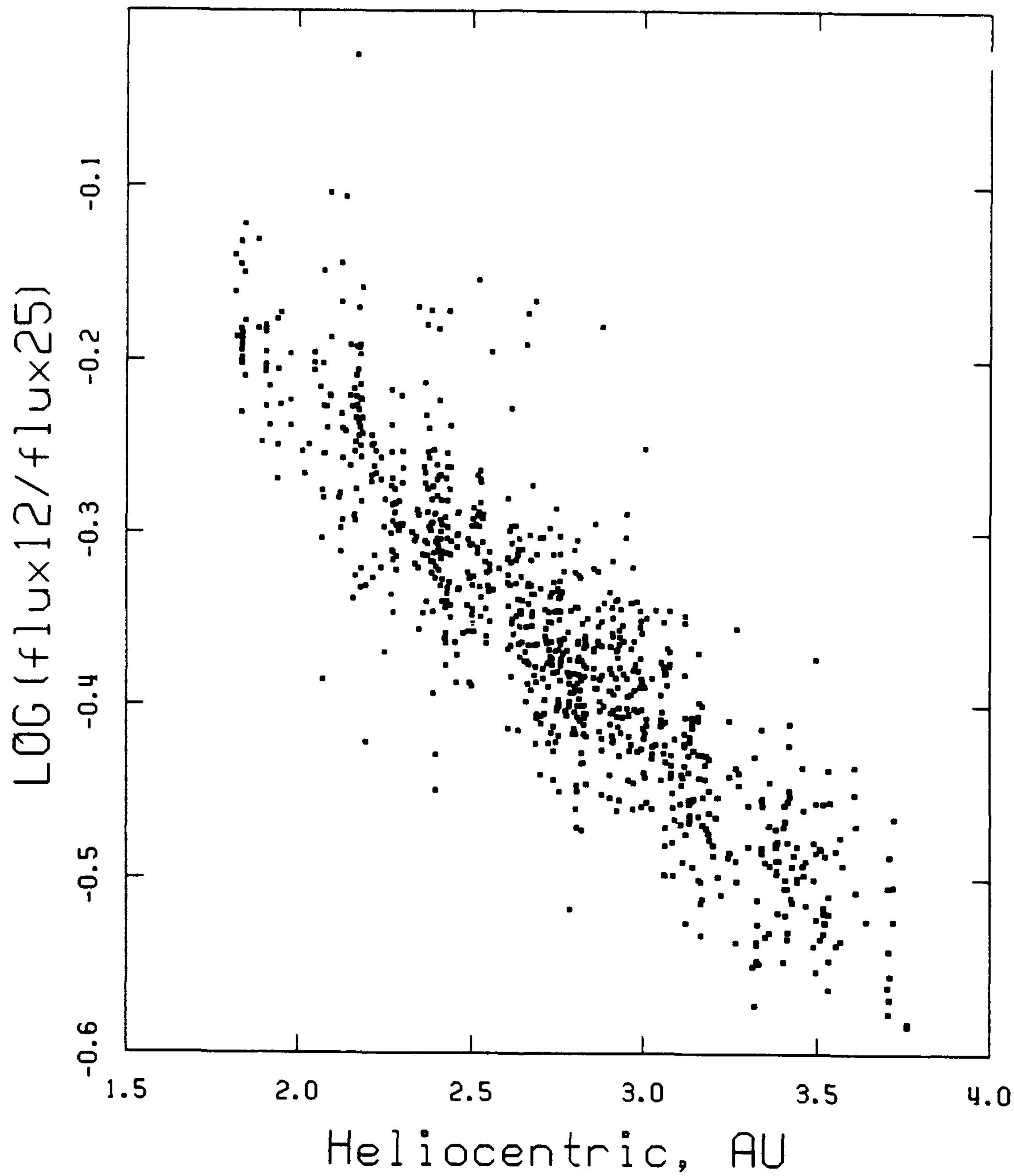

Figure 10. Log_{10} of the flux density color ratio (12 μm to 25 μm) vs. heliocentric distance in AU for each final accepted IMPS asteroid sighting with a 25 μm flux density greater than 10 Jansky. Asteroids in the inner belt have higher color temperatures than those in the outer belt. Apparent associations with a 12 μm flux density greater than the 25 μm flux density (i.e., $\log_{10}$ of the ratio greater than zero) were rejected. This criteria was used to discriminate against confusion with hot background stars (*cf.*, Figs 11, 12 and 15).

Figure 11 plots the $\log_{10}$ of the flux density *color ratio (25 μm to 60 μm) against the* heliocentric distance in AU for each final accepted IMPS asteroid sighting with a 25 μm flux density greater than 10 Jansky. Again, no Trojan asteroids are this bright. Asteroids in the inner belt have higher color temperatures than those in the outer belt. Apparent associations with a 60 μm flux density much greater than the 25 μm flux density (*i.e.*, $\log_{10}$ of the ratio less than -0.1) are rejected by IMPS processing (*cf.*, Chapter 4). This criteria is used to discriminate against confusion with cold background sources such as molecular clouds, galaxies and knots of "galactic cirrus" (*cf.*, Figs. 10, 12, and 15).

Figure 12 plots the $\log_{10}$ of the flux density color ratio (12 μm to 25 μm) against the $\log_{10}$ of the flux density color ratio (25 μm to 60 μm) for each final accepted IMPS asteroid sighting with a 25 μm flux density greater than 10 Jansky. High color temperatures for asteroids in the inner belt plot towards the upper right and low color temperatures for asteroids in the outer belt plot towards the lower left (*cf.*, Figs. 10 and 11 which include subsets of the data used for this diagram). Most hot stars and cold background sources are outside the range of this color window (*cf.*, lower right quadrant of Fig. 15).

The 12 μm to 25 μm color ratio has a somewhat larger range than the 25 μm to 60 μm color ratio for the temperatures observed across the belt due to the shape of the planck function. Much of the scatter in this diagram is related to the reproducibility of the flux density ratios for each asteroid. The major trend from the upper right to the lower left is due to decreasing color temperature with increasing heliocentric distance. This type of plot can resolve three or four temperature regimes from the inner to the outer main asteroid belt (*cf.*, Veeder *et al.* 1989b). The range of derived visual albedos from the standard thermal models for asteroids within this sample superimposes a relatively small additional spread (along the same trend line) in the observed color temperatures.

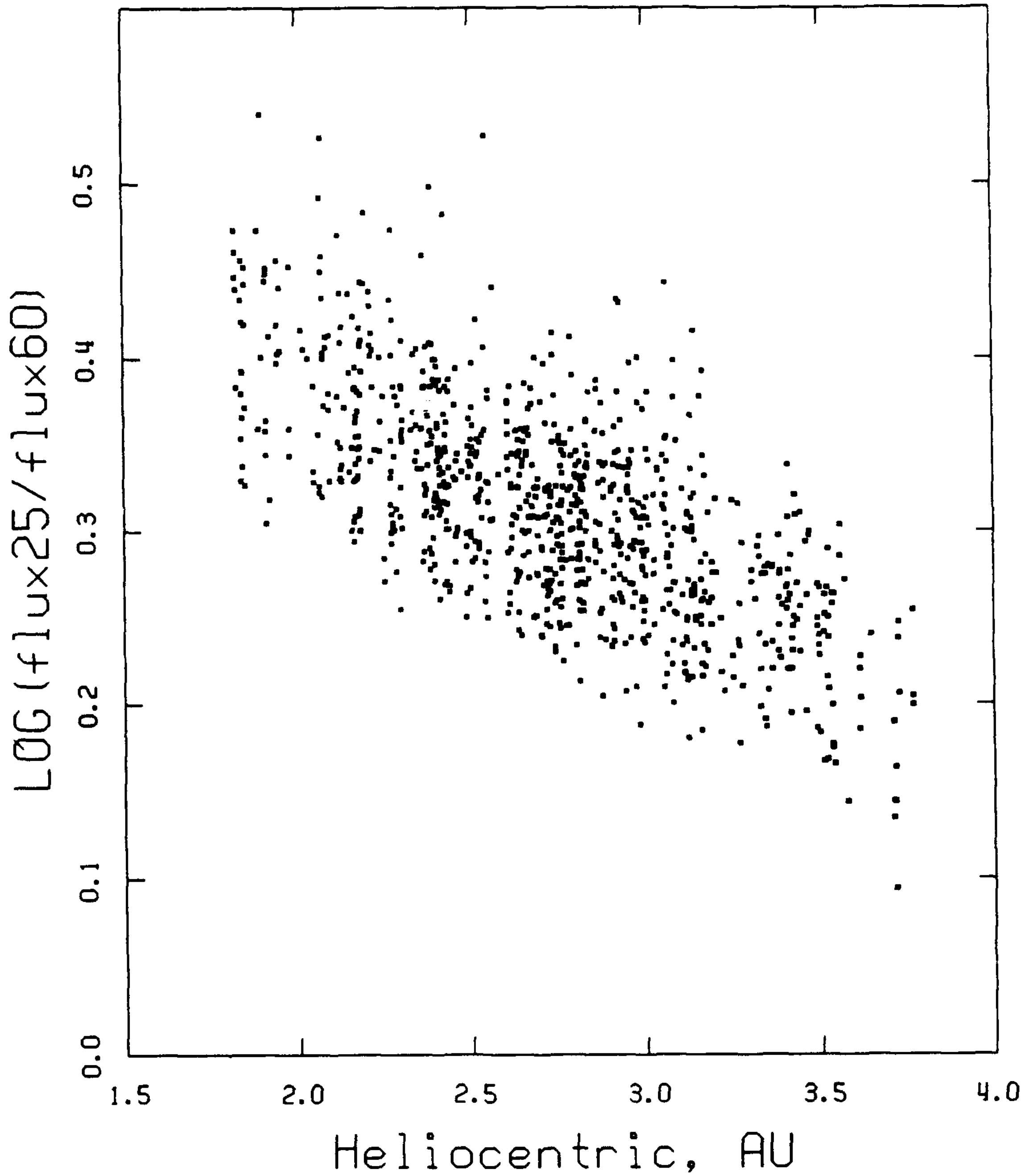

Figure 11. $\log_{10}$ of the flux density color ratio (25 μm to 60 μm) vs. heliocentric distance in AU for each final accepted IMPS asteroid sighting with a 25 μm flux density greater than 10 Jansky. Asteroids in the inner belt have higher color temperatures than those in the outer belt. Apparent associations with a 60 μm flux density greater than the 25 μm flux density (i.e., $\log_{10}$ of the ratio less than -0.1) were rejected. This criteria was used to discriminate against confusion with cold background sources such as molecular clouds, galaxies and knots of "galactic cirrus" (*cf.*, Figs. 10, 12 and 15).

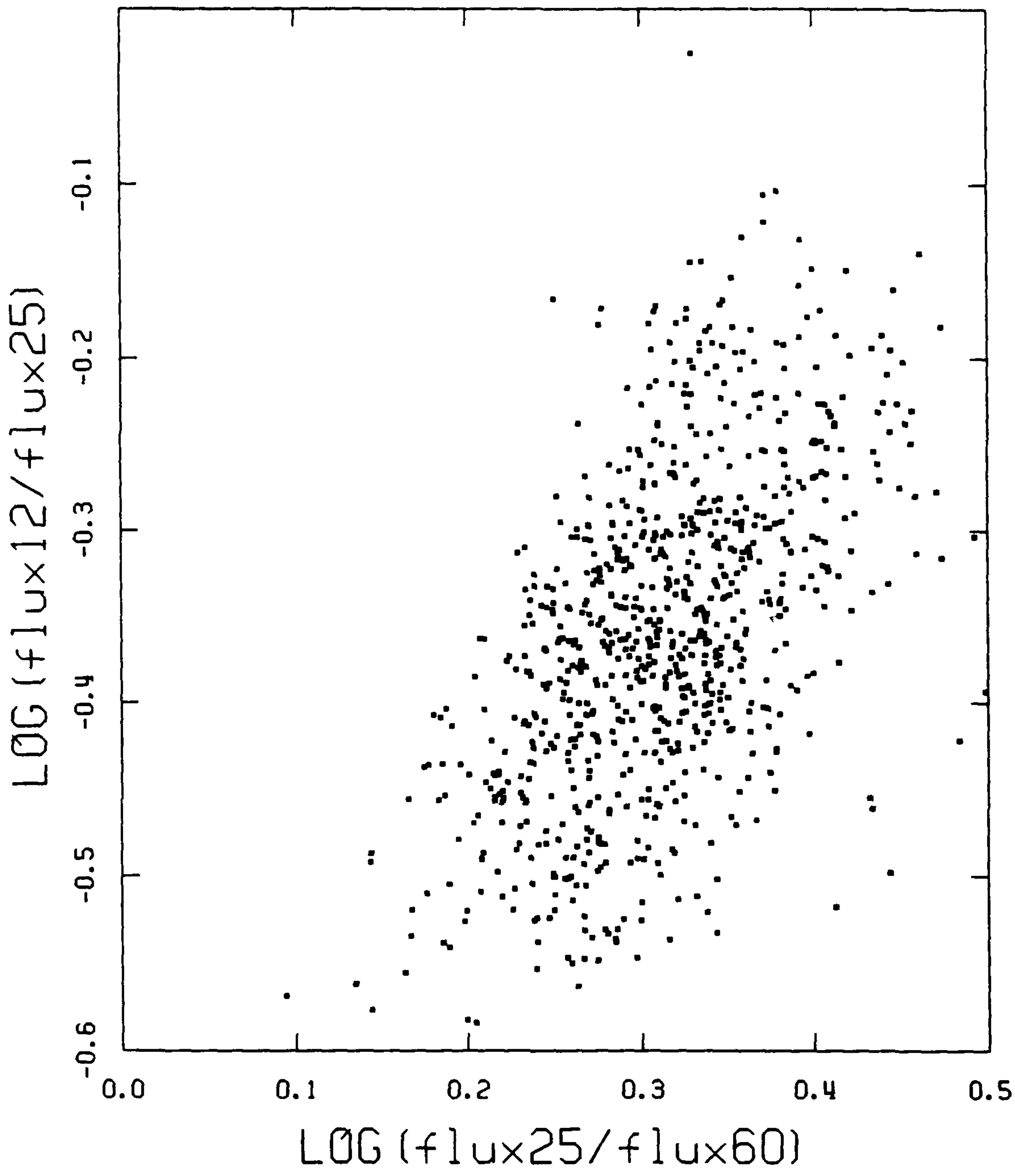

Figure 12. Log_{10} of the flux density color ratio (12 μm to 25 μm) vs. (25 μm to 60 μm) for each final accepted IMPS asteroid sighting with a 25 μm flux density greater than 10 Jansky. High color temperatures for asteroids in the inner belt plot towards the upper right and low color temperatures for asteroids in the outer belt plot towards the lower left. Most hot stars and cold background sources are outside the range of this plot (*cf.*, Fig. 15).

5.2 Rejected Candidates

IMPS rejects candidate asteroid associations of low quality for many reasons. Most such questionable associations are rejected for a combination of reasons (*cf.*, Chapter 4). The most important criteria IMPS uses for this purpose include position score, color, outer slot, months confirmation (MCON) and matches with any of several IRAS catalogs of stationary (background) sources. These criteria force rejection of all observations within a candidate sighting. Flags for these criteria are found in AStatW (*cf.*, §5.2.3 below).

In addition, IMPS rejects singletons with a flux status less than 5 (*i.e.*, without positive seconds confirmed detection in both redundant rows of 25 μm detectors in the IRAS focal plane; *cf.*, AstFSt). Individual observations (but not necessarily the whole sighting) which result in extremely low derived albedos (*i.e.*, less than 0.01) are rejected because these do not make physical sense. Rejected asteroid associations are summarized in the IMPS Reject Catalog (final product number 105).

Figure 13 is a sky plot of the ecliptic latitude against longitude in degrees for IMPS rejected asteroid associations. The distribution of rejected associations is similar to that of accepted asteroid sightings (*cf.*, Fig. 3). The galactic center is near ecliptic longitude 270°. This area includes many associations which are confused with background sources (*cf.*, Fig. 14). There are two gaps in the IRAS scan coverage near 160° and 340° longitude.

5.2.1 Confused Sources

Many asteroid associations are rejected on the basis of confusion in position with other non-asteroid catalog (*e.g.*, point) sources. Thus, a bright asteroid confused with only a faint stationary source is still rejected by IMPS and these rejects may have color temperatures near those seen in the asteroid belt. Fortunately, it is only necessary to apply this conservative judgment in a few cases.

Figure 14 displays a histogram for 364 MCON (WSDB "weeks" or months confirmed and flagged by bit number 5 in the AStatW status word and therefore rejected IMPS asteroid associations which are also included in Fig. 13) as a function of the galactic latitude. These associations are strongly concentrated towards the galactic center near 270° ecliptic longitude (as well as the anti-center) and result from confusion with stationary background sources. Only a few are also confused at high latitudes.

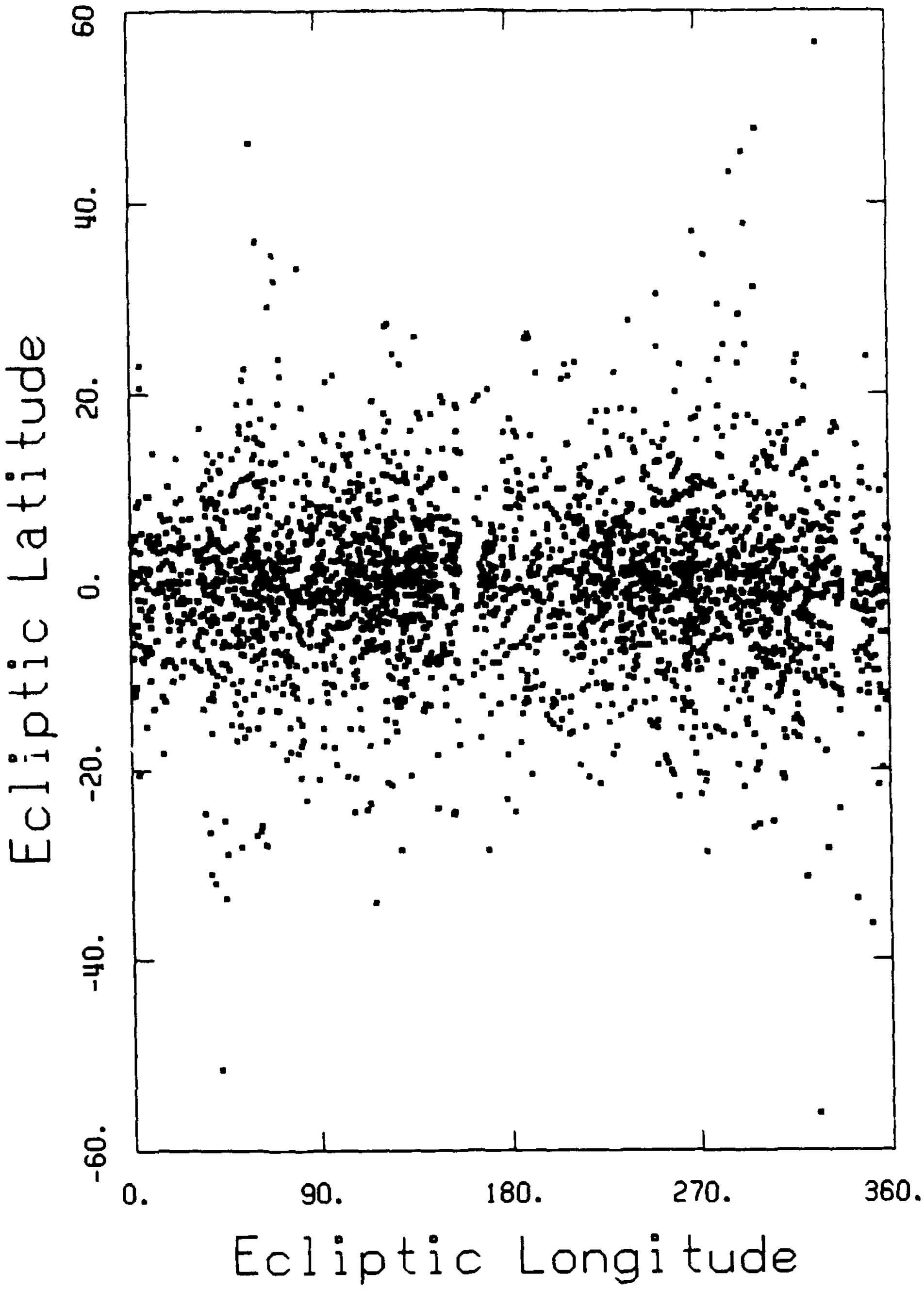

Figure 13. Ecliptic latitude vs. longitude in degrees sky plot for IMPS rejected asteroid associations. There are two gaps in the IRAS scan coverage near 160 and 340 degrees longitude (*cf.*, Figs. 3 and 16).

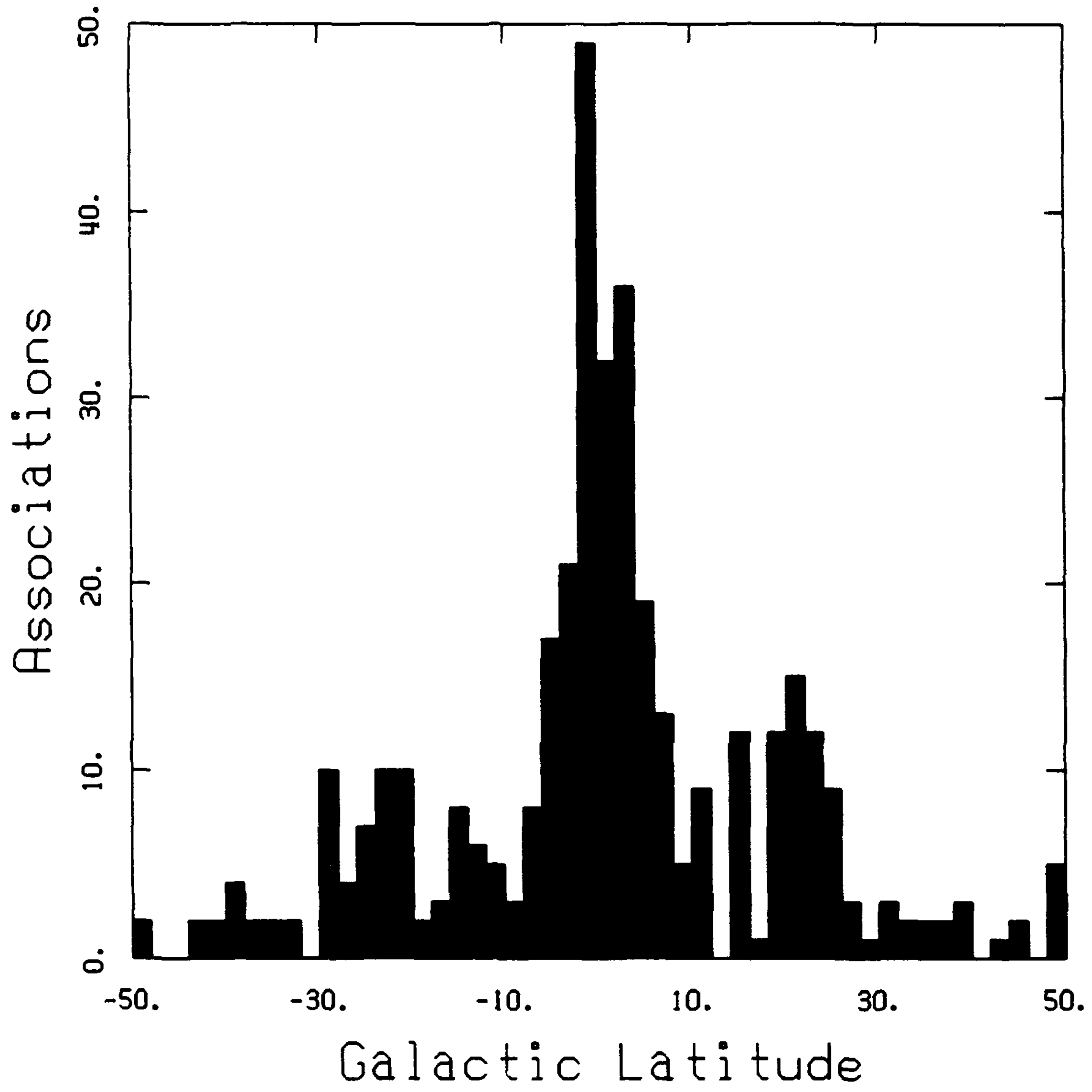

Figure 14. Histogram for 364 MCON (months confirmed flagged by bit number 5 in the AStatW status word) and therefore rejected IMPS asteroid associations as a function of galactic latitude. These are strongly concentrated towards the galactic center near 270 degrees ecliptic longitude (as well as the anti-center) and result from confusion with stationary background sources. Only a few are also confused at high latitudes.

5.2.2 Non-Solar System Colors

For sources observed at 12 and/or 60 μm as well as 25 μm, IMPS uses infrared color ratios to discriminate against hot stars and cold background sources such as *molecular clouds, galaxies and knots of* "*galactic cirrus*" as described in Chapter 4.

Figure 15 plots the $\log_{10}$ of the flux density color ratio (12 μm to 25 μm) against the $\log_{10}$ of the flux density color ratio (25 μm to 60 μm) for each MCON (WSDB weeks "months" confirmed flagged by bit number 5 in the AStatW status word) and therefore rejected IMPS asteroid association. Hot stars are found in the upper right quadrant, cold background sources (such as molecular clouds, galaxies and knots of "galactic cirrus") in the lower left quadrant and "non-thermal" or composite sources in the upper left quadrant of this plot. Both moving and stationary sources with apparent temperatures similar to asteroids are found in the lower right quadrant of this plot. This diagram defines the boundaries of the IMPS color window which accepted asteroid associations are required to pass (*cf.*, Fig. 12).

5.2.3 Fatal Flags

The Asteroid Status Word (AStatW) is a 32 bit code word generated for each sighting (whether accepted or rejected) as part of IMPS processing. AStatW is explicated in Chapter 12. Flags which are set as a warning of a potential problem but for which no processing decisions are made are discussed in (§6.5.1). The following AStatW flags are set if a sighting fails a particular IMPS acceptance criteria and is therefore rejected:

Bit 1 is set if the asteroid sighting has a parameter $\{[\log_{10}(\mathrm{SCORE})-3]/6\}$ less than 0.4 (*cf.*, Chapter 4). Sightings with a value less than 0.5 are also flagged as a warning. This parameter is a measure of the difference between the predicted and observed positions for an asteroid association (*cf.*, Fig. 22).

Bit 5 is set if the asteroid sighting is WSDB "weeks" or months confirmed (MCON). These are also likely to be confused with stationary background sources. (*e.g., cf.*, AStatW bit 9 for point sources).

Bit 9 is set for all asteroid sightings confused with sources in the IRAS Point Source Catalog (*IRAS Explanatory Supplement, 1988*). These are a subset of those with AStatW bit 5 set (*cf.*, Fig. 14).

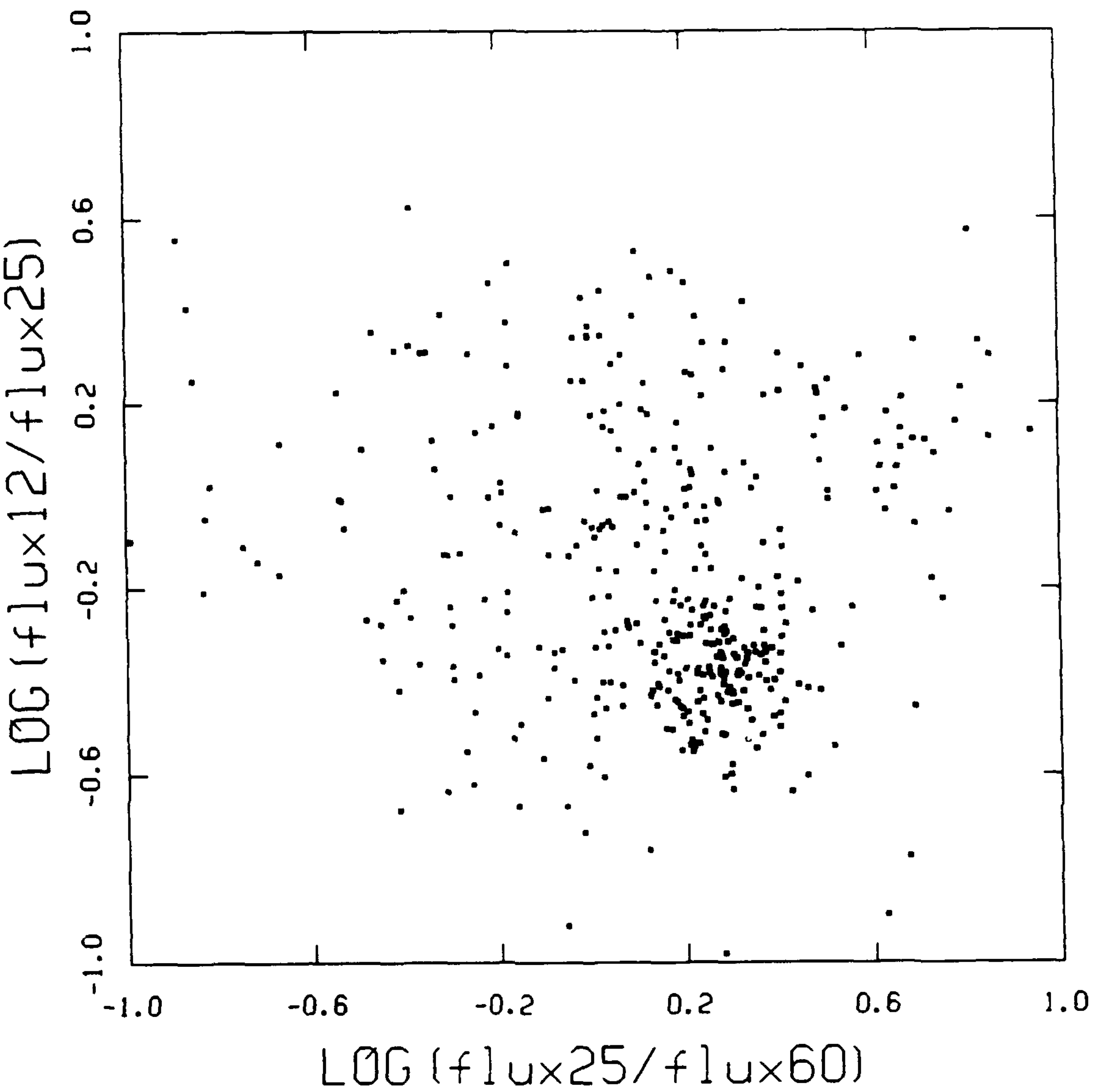

Figure 15. Log_{10} of the flux density color ratio (12 μm to 25 μm) vs. (25 μm to 60 μm) for each MCON (months confirmed flagged by bit number 5 in the AStatW status word), and therefore rejected IMPS asteroid association. Hot stars are found in the upper right quadrant, cold background sources in the lower left quadrant and "non-thermal" or composite sources in the upper left quadrant of this plot. Fixed sources with apparent temperatures similar to asteroids are found in the lower right quadrant of this plot. This quadrant is the IMPS color window (*cf.*, Fig. 12).

Bit 10 is set if the asteroid sighting occurs only on outer slot detectors in the IRAS focal plane array.

Bit 17 is set for all asteroid sightings confused with sources in the *IRAS Faint Source Survey, 1989*.

Bit 20 is set for all asteroid sightings confused with sources in the *IRAS Serendipitous Survey Catalog, 1986*.

Bit 31 is set if more than one source is associated with a single asteroid prediction. IMPS processing cannot resolve this type of ambiguity.

5.3 Missed Predictions

Figure 16 displays a histogram for asteroids which were scanned but never detected by IRAS as a function of the number of missed predictions per asteroid. There are a total of 8,890 predicted scans not associated with any source for 3,418 such asteroids. Of these, 1,476 are predicted and missed only once. This peak at unity is stronger than the distribution observed for asteroids actually detected as shown in Fig. 19.

5.3.1 Ecliptic Sky

Figure 17 plots the ecliptic latitude against longitude in degrees for the brightest missed prediction of each asteroid which was scanned but never detected. Data for 3,418 IMPS predicted asteroids not associated with any accepted and/or rejected sighting are plotted (*cf.*, Figs. 3 and 13). There are two gaps in the IRAS scan coverage near 160° and 340° longitude. The galactic center is near ecliptic longitude 270°. The apparent increased density in ecliptic longitude range 60° – 155° is due to a subtle geometric effect connected with the way in which HCON three was conducted near the end of the mission together with the orbital motion of the asteroids. The distribution of IMPS asteroid associations on the sky shows no additional obviously spurious structure. See §8.1 for a more detailed discussion.

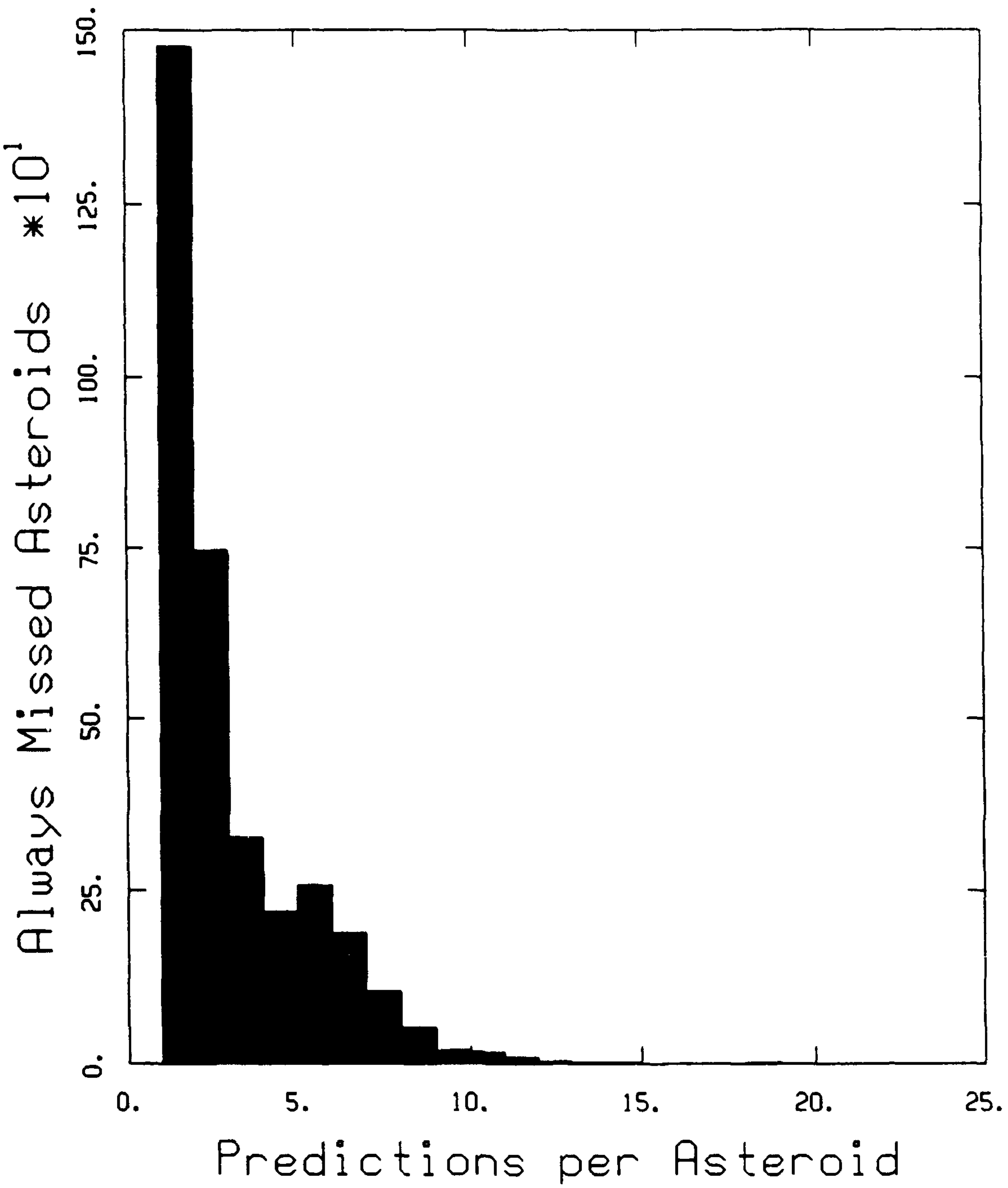

Figure 16. Histogram for scanned IMPS asteroids with no accepted or rejected sightings as a function of number of missed predictions per asteroid. There are a total of 8,890 predicted scans not associated with any source for 3,418 such asteroids.

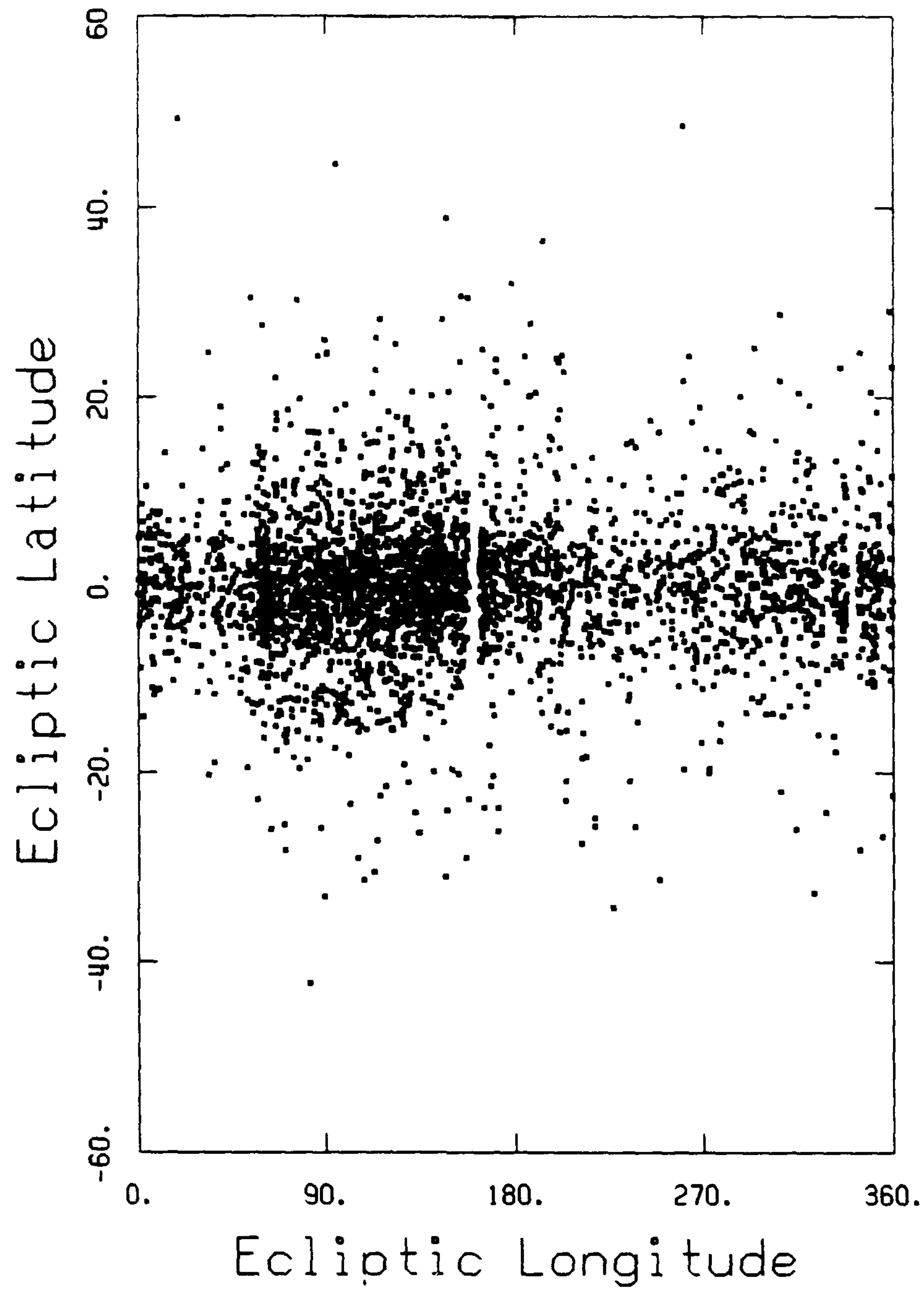

Figure 17. Ecliptic latitude vs. longitude in degrees sky plot for the brightest missed prediction of each asteroid which was scanned but never detected. The region between 60° and 150° longitude was scanned repeatedly by IRAS. There are two gaps in IRAS scan coverage near 160° and 340° longitude. Data for 3,418 IMPS predicted asteroids not associated with any accepted and/or rejected sighting are plotted (*cf.*, Figs. 3 and 13).

5.3.2 Predicted Flux Density

Figure 18 displays a histogram for the brightest missed predictions for each IMPS asteroid which was scanned but never detected as a function of the $\log_{10}$ 25 μm flux density (Jansky). Data for 3,402 such predictions are plotted. Note that these data are binned on a log scale. IMPS predictions utilize H visual magnitudes listed in the IMPS Ground-Based Data Catalog (final product number 107) as well as visual albedos from the *IRAS Asteroid and Comet Survey, 1986* or a default visual albedo of 0.01 for high numbered and type 2 asteroids for which there are no other available data. Most missed predictions are near the IRAS survey SNR (estimated 3.0) cutoff.

Many predicted scans of asteroid positions occur when the asteroids are at such large heliocentric and geocentric distances that they are obviously too faint for IRAS to detect at the time. The IMPS Missed-Predictions Catalog (final product number 106) summarizes the missed asteroid scans for each asteroid.

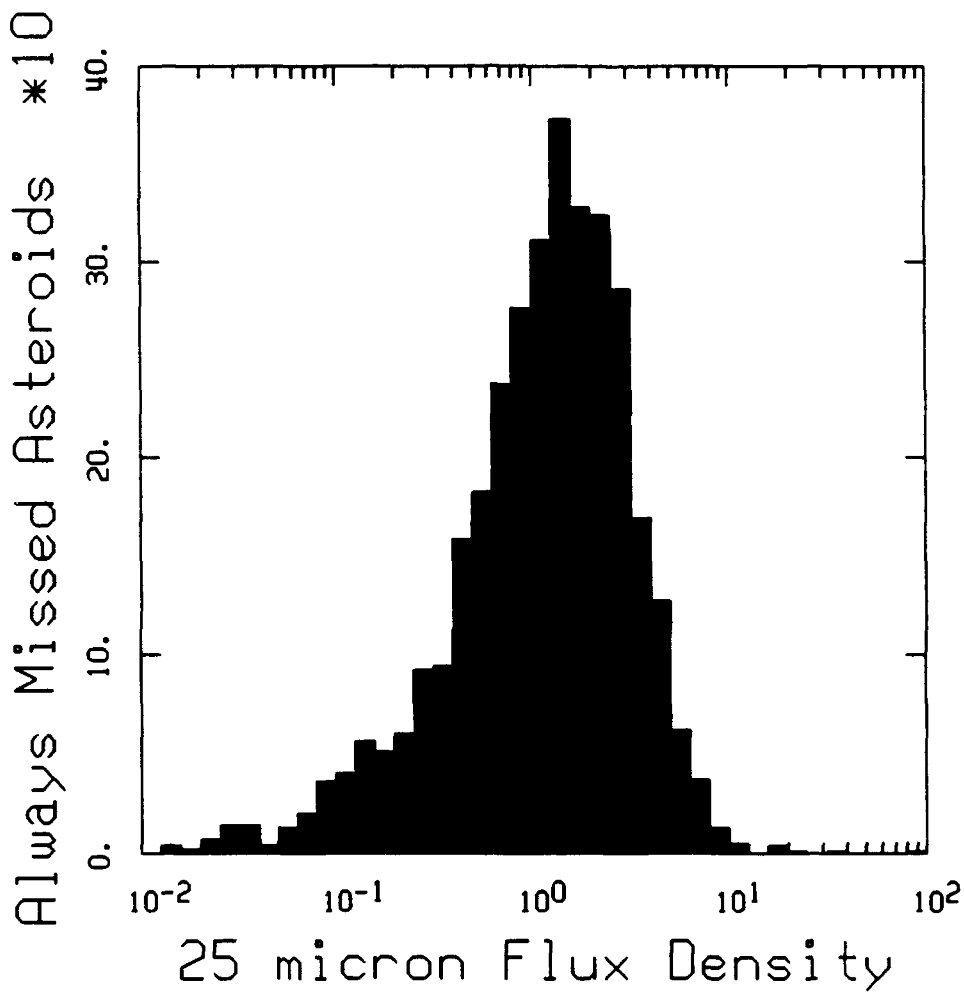

Figure 18. Log_{10} 25 µm flux density in Jansky histogram for the brightest missed prediction of each IMPS asteroid which was scanned but never detected. Data for 3,402 predictions are plotted. Most missed predictions are near the IRAS survey SNR (estimated 3.0) cutoff.

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Chapter 6

IRAS MINOR PLANET SURVEY ACCEPTED SIGHTINGS ANALYSIS

Glenn J. Veeder and Edward F. Tedesco

This chapter addresses the statistics, reliability, and completeness of the accepted sightings. It concentrates on the explication of relevant tables.

IMPS asteroid associations are made on the basis of position coincidences between the predictions of asteroid ephemerides (for asteroids with known orbital elements) and IRAS sources. IMPS asteroid data are only available when IRAS was in its survey mode. An IMPS asteroid sighting may consist of data at several wavelengths (*e.g.*, 12, 25, 60 and/or 100 μm). IMPS requires that every candidate association have a detection at 25 μm. Since IMPS accepts (or rejects) each candidate observation at each wavelength separately on the basis of various technical parameters, the 25 μm observation within a multiple wavelength sighting is rejected in a few cases (thus leaving orphan accepted observations at 12 and/or 60 μm). Some criteria may force rejection of an entire sighting. Associations (including rejects and misses) are discussed in Chapter 5.

Data and status words are given for a total of 8,210 accepted IMPS sightings in the IMPS Sightings Data Base (final product number 108). In particular, the Asteroid Status Word, AStatW (*cf.*, Chapter 12), is useful for tracking both accepted and rejected sightings of an asteroid. The IMPS AStatW is similar in function but not identical in detail to that utilized in the *IRAS Asteroid and Comet Survey, 1986*. The IMPS window which selects color temperatures appropriate for asteroid infrared sources is the same as that used by ADAS. IMPS requirements for position accuracy are more stringent than the analogous ADAS requirements as discussed in Chapter 4. Averaged final diameters and albedos are discussed in Chapter 7.

6.1 Accepted Sighting Statistics

IMPS processing utilizes orbital elements for asteroids through identification number 4679 (ID Type 1) plus 2,632 additional sets based upno observations from two or more oppositions (ID Type 2). This is more than twice as many as were available during the processing described in the IRAS Asteroid and Comet Survey (1986). IMPS sightings are summarized in Table 2.

6.1.1 Summary of IMPS Sightings

Table 2. IMPS Sightings Summary

Set	ID Type 1	ID Type 2	Total
Input elements	4,679	2,632	7,311
Total sightings	10,523	1,089	11,612
Rejected sightings	2,586	816	3,402
Accepted multiple observations	7,843	247	8,090
Accepted single observations only	94	26	120

Multiple asteroid observations are those which have either accepted data at more than one wavelength within a single accepted sighting or else accepted data in more than one sighting which are used to derive the average quantities such as albedos and diameters given in the IMPS Albedos and Diameters Catalog (final product number 102). Accepted IMPS singleton asteroids have accepted data at only one wavelength (usually at 25 μm) within a single accepted sighting which are used for the IMPS Singleton Catalog (final product number 103). Accepted singletons are required to have a flux status 5 which is only possible for positive seconds-confirmed detections in both redundant rows of detectors in the IRAS focal plane.

Figure 19 displays a histogram for all final accepted IMPS asteroids (including singletons) as a function of the number of sightings per asteroid. There are a total of 8,210 accepted sightings of 2,004 accepted asteroids as shown in the Table 3. There are 285 asteroids with only one accepted sighting some of which have accepted data at more than one wavelength.

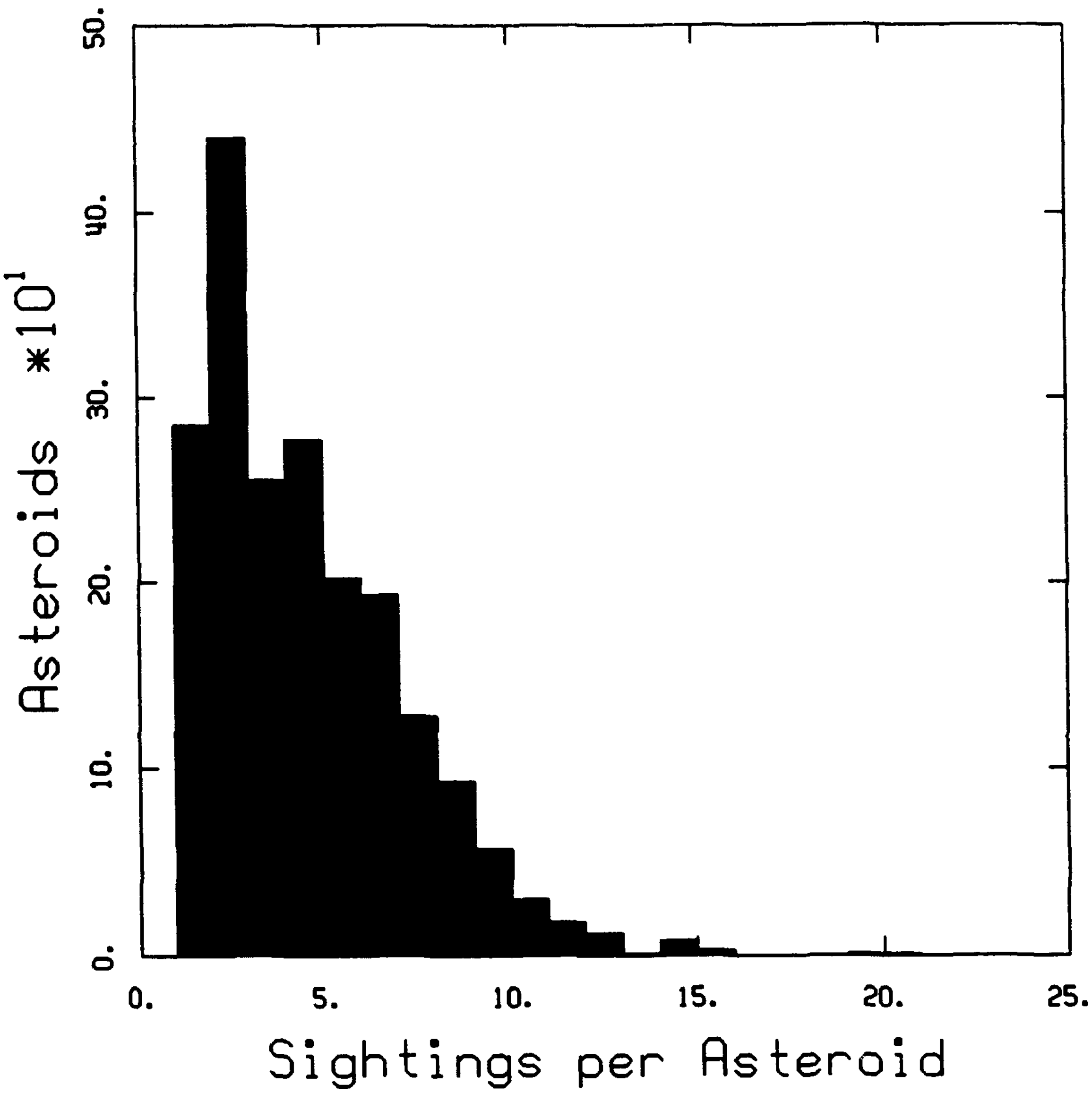

Figure 19. Histogram for all final accepted IMPS asteroids (including singletons) as a function of number of sightings per asteroid. There are a total of 8,210 sightings of 2,004 asteroids. (Note that some single sightings have accepted data at more than one wavelength.)

6.1.2 Detection Success Rate

Figure 20 plots the detection rate against the normalized uncertainty (of the average model albedo) for each final accepted IMPS asteroid with two or more accepted observations (possibly within a single sighting). This fraction observed ratio (FOR) is defined as the number of sightings used divided by the number used plus the number missed. This ratio is unity for asteroids which produced acceptable data every time they were scanned (and does not depend upon the number of rejected sightings). The abscissa is the average albedo divided by the albedo uncertainty listed in the IMPS Albedos and Diameters Catalog (final product number 102). The FOR ratio is a measure of whether an asteroid actually produced qualified sightings as many times as expected by the IMPS processing system.

Figure 21 shows the analogous plot for accepted singleton asteroids. Here the abscissa is the IRAS estimate of the instantaneous SNR which SDAS computed from a model of the sky background to one decimal place (*cf.*, IMPS Singleton Catalog, final product number 103). All sightings (including rejects) for each accepted asteroid with a FOR ratio less than 0.3 are flagged by bit number 12 in the AStatW status word. Figures 20 and 21 define the threshold for setting this bit in AStatW which is only a warning (*cf.*, §6.5.1). Bright asteroids tend to have multiple accepted sightings and few misses which results in many FOR ratios near unity. Singletons tend to have lower FOR ratios than the asteroids with multiple sightings. *Bona fide* faint asteroids with large light curves may often fall below the survey limit and thus yield low FOR ratios. Other objects with very low FOR ratios may be spurious noise hits or asteroids confused with (faint) background sources. Such cases do not appear to be prevalent in the IMPS final products.

6.1.3 Position Match Discrepancy

IMPS asteroid associations are made on the basis of position coincidences between the predictions of asteroid ephemerides and IRAS sources. An IMPS position score parameter is defined in §4.1 for the purpose of quantifying the quality of a match between the predicted and observed position of each asteroid association.

The footprint projected on the sky for an IRAS detector is elongated perpendicular to the scan direction due to the geometry of the detectors in the focal plane. These "error ellipses" tend to be elongated in longitude near the ecliptic equator, but can be at any angle near the poles. The position score is calculated by comparing an asteroid ephemerides prediction with a reconstruction of the entire probability distribution for the position of the IRAS detectors projected against the sky. The most favorable effective resolution is about 1 arcminute in the scan direction. Low position scores

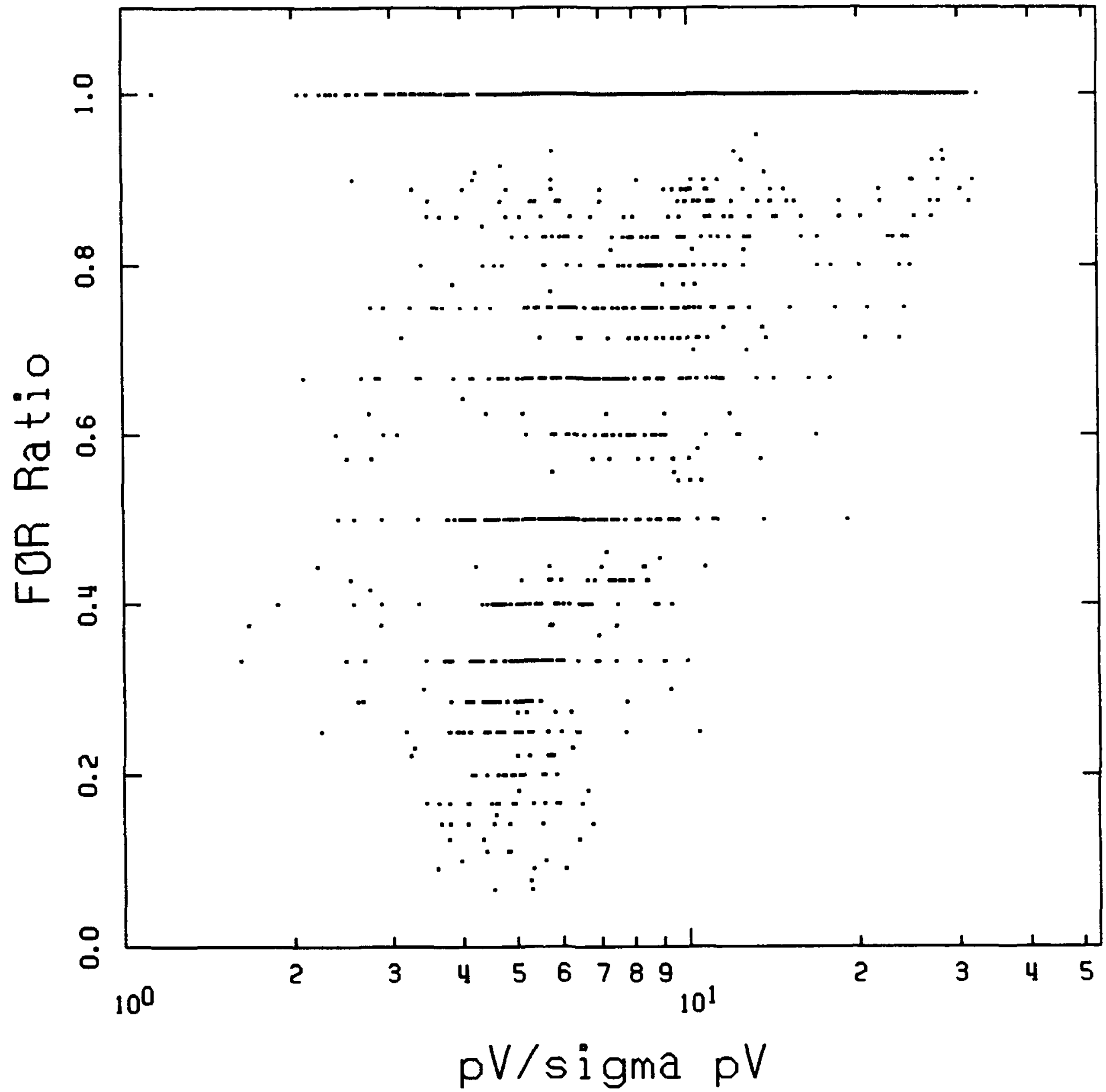

Figure 20. Detection rate vs. normalized uncertainty (of the average model albedo) for each final accepted IMPS asteroid with two or more accepted observations (possibly within a single sighting). Each accepted asteroid with a FOR ratio less than 0.3 has bit number 12 in the AStatW status word set as a warning in all its sightings (including rejects). Most (good) predicted scans of bright asteroids yield (multiple) accepted sightings (*cf.*, Fig. 21).

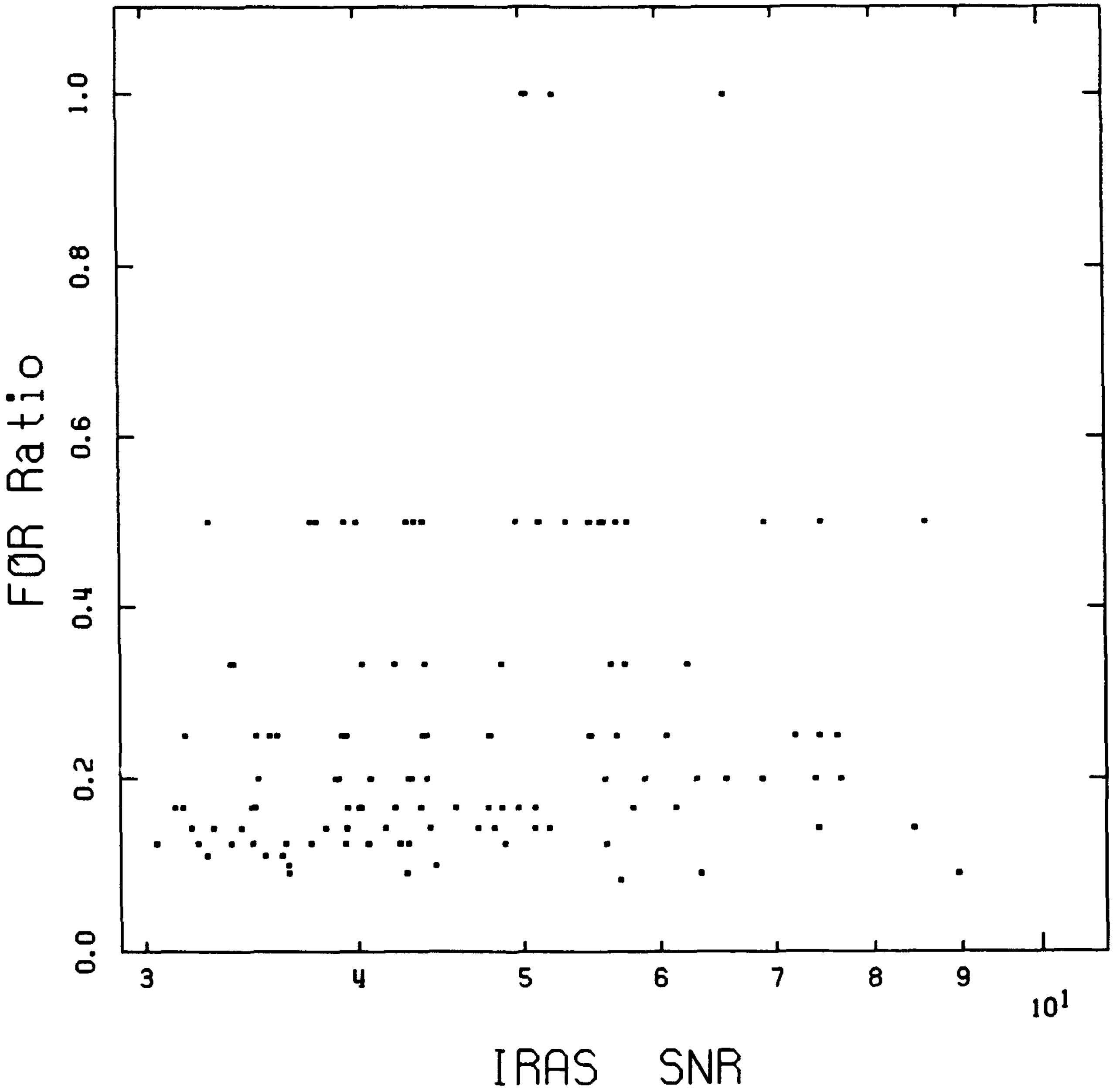

Figure 21. Detection rate vs. $\log_{10}$ (IRAS estimated) normalized SNR for each final accepted IMPS singleton (*i.e.*, asteroids with only one accepted observation at one wavelength) asteroid. Each accepted asteroid with a FOR ratio less than 0.3 has bit number 12 in the AStatW status word set as a warning in all its sightings (including rejects). The SNR plotted is dithered (less than 0.1) around the IRAS estimate (*cf.*, Fig. 20).

correlate with large differences between predicted and observed positions and also imply low confidence in the asteroid association.

Figures 22a, 22b, and 22c plot the IMPS position score against the difference in - arcseconds between the predicted and observed position for the brightest and faintest accepted sightings of asteroids with more than one final IMPS accepted association and also the accepted IMPS singleton asteroids. These figures define the threshold for associations with scores lower than 0.5 which are flagged by bit number 1 in the AStatW status word as a warning (*cf*, §6.5.1). Candidate associations with scores lower than 0.4 are rejected because these are suspected to have low reliability. Thus, there are no IMPS accepted associations with position differences larger than about 200 arcseconds. Singletons do not have as strong a concentration at low differences as do multiply detected asteroids. Singletons rejected because of a flux status lower than 5 also tend to have low position scores.

Figure 23a displays a histogram for the accepted sightings of accepted IMPS asteroids with multiple accepted sightings as a function of the differences in arcseconds between the predicted and observed positions. This plot shows data from 7,924 sightings for 1,719 asteroids. The width of this distribution is determined by the effective angular sizes of the IRAS detectors as well as scan path uncertainty (Kia and Fowler, 1987). Figure 23b is the analogous histogram for 165 accepted IMPS asteroids with only a single sighting (but accepted data at multiple wavelengths) plus 120 IMPS singletons (with only one accepted observation at one wavelength). The lack of a strong peak near zero indicates that even these associations have reduced accuracy.

Figures 24a, 24b, and 24c show expanded views of the difference in arcseconds between the predicted and observed position plotted against the $\log_{10}$ of the (IRAS estimated) SNR for the brightest and faintest sightings of asteroids with more than one final IMPS accepted association and also the final accepted IMPS singleton asteroids. The value plotted for SNR is dithered (less than 0.1) around the IRAS estimate because it is available from SDAS to only one decimal place. The 1983 IRAS survey cutoff is 3.0 for the estimated SNR at 25 μm. The SNR scale has been expanded to show the break in structure of the distribution of the data below a value of about 10 for the SNR. The observed trend continues smoothly beyond an SNR of 100 off the right side of this diagram. The structure within this expanded view shows that the accuracy of asteroid associations decreases somewhat below a value of about 10 SNR. Singletons don't show a strong peak in their distribution at small differences and large scores. This is probably an indication of low reliability which might be due to their low SNR.

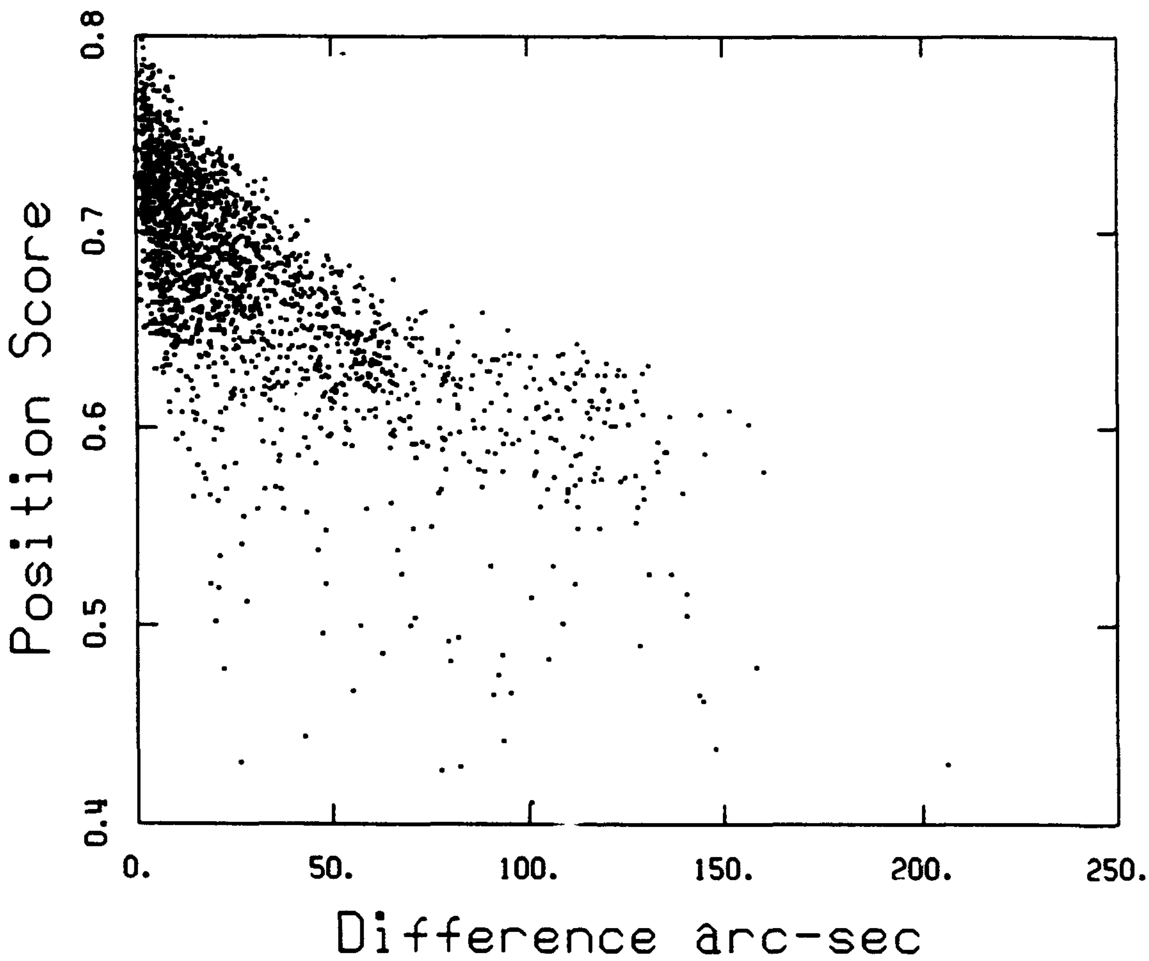

Figure 22a. Position score vs. difference in arc-sec between the predicted and observed position for the brightest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. Each association with a score poorer than 0.5 has bit number 1 in the ASTATW status word set as a warning. Associations with scores poorer than 0.4 are rejected. (*cf.*, Figs. 22b and 22c).

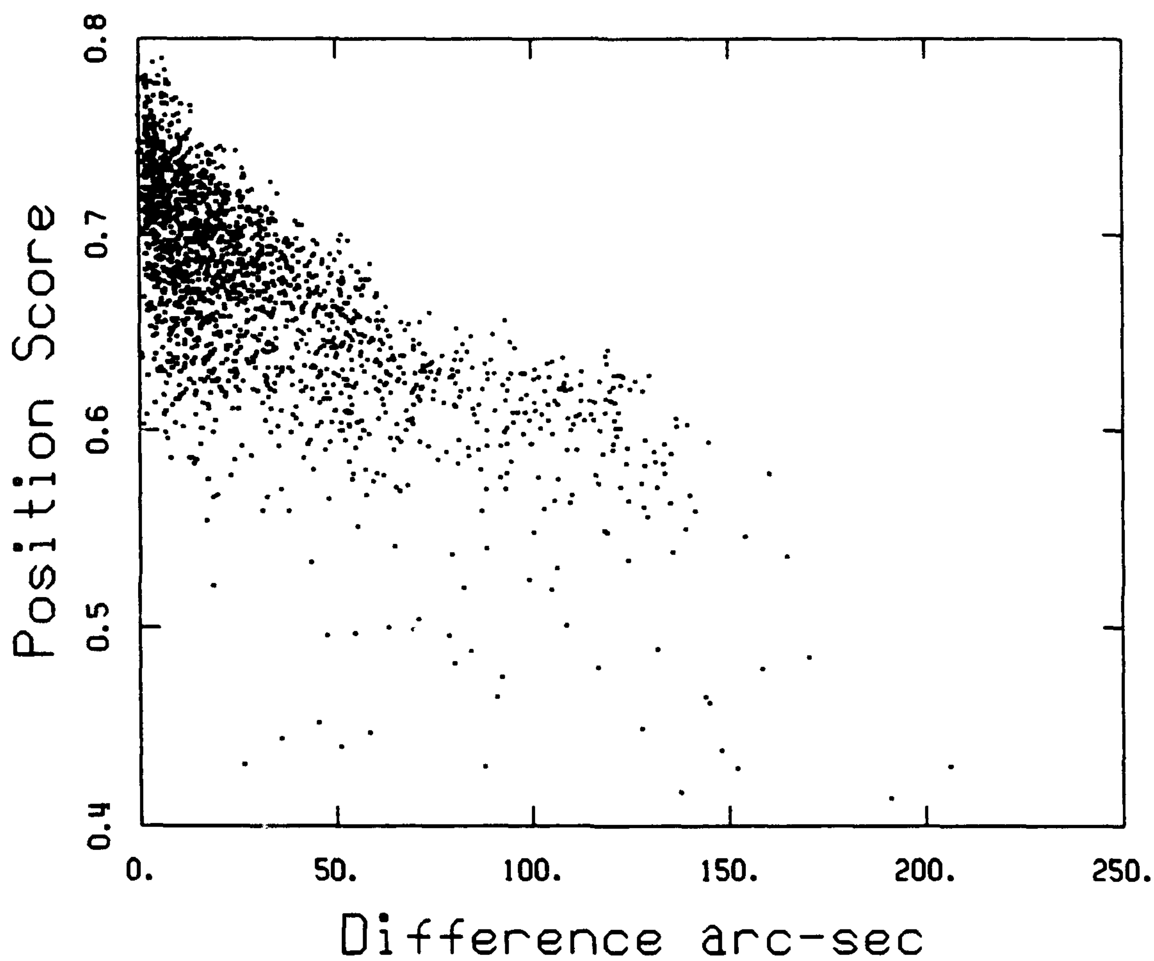

Figure 22b. Position score vs. difference in arc-sec between the predicted and observed position for the faintest accepted sighting (excluding singletons) of each final accepted IMPS asteroid (*cf.*, Figs 22a and 22c).

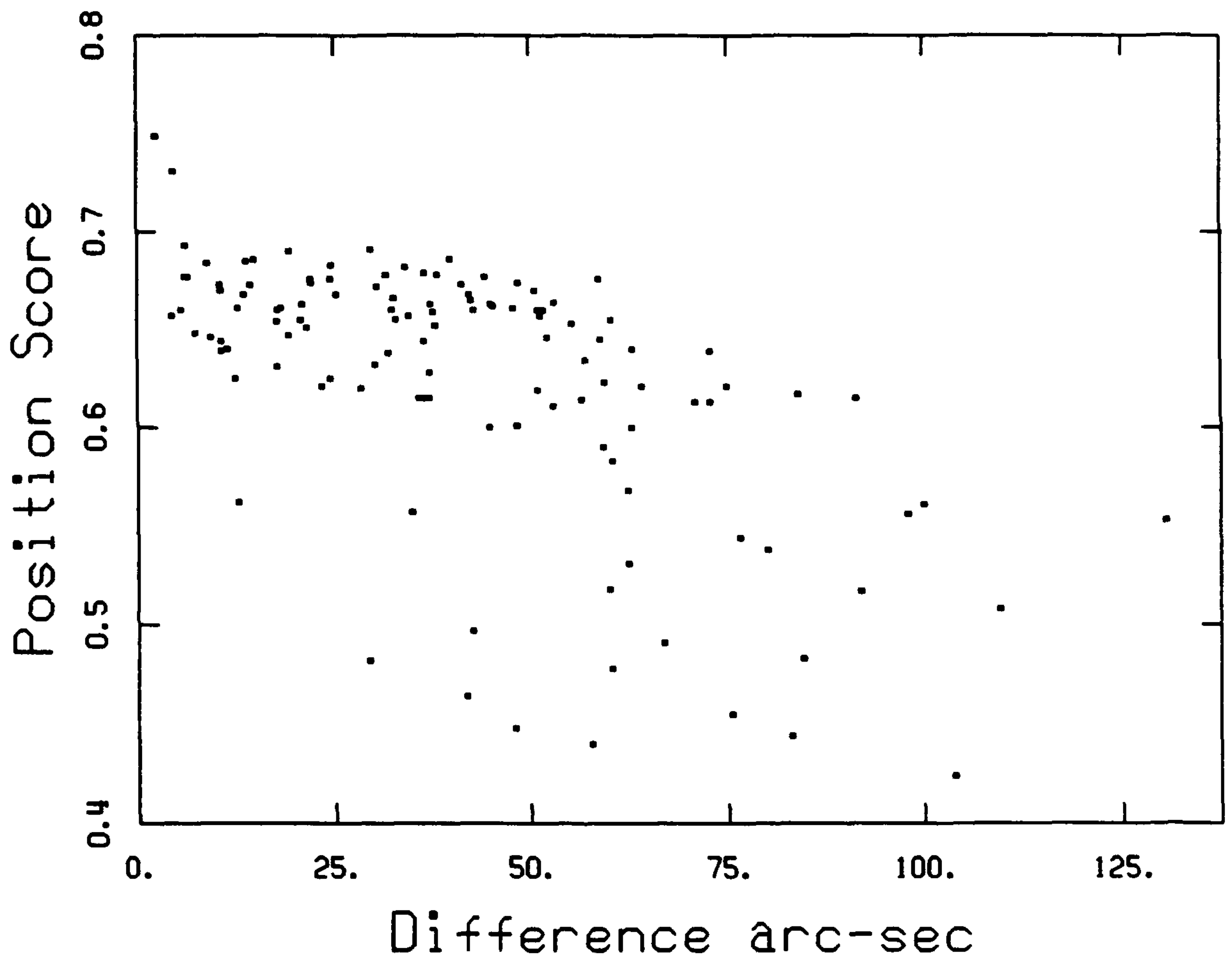

Figure 22c. Position score vs. difference in arc-sec between the predicted and observed position for each final accepted IMPS singleton (with only one accepted observation at one wavelength) asteroid (*cf.*, Figs. 22a and 22b).

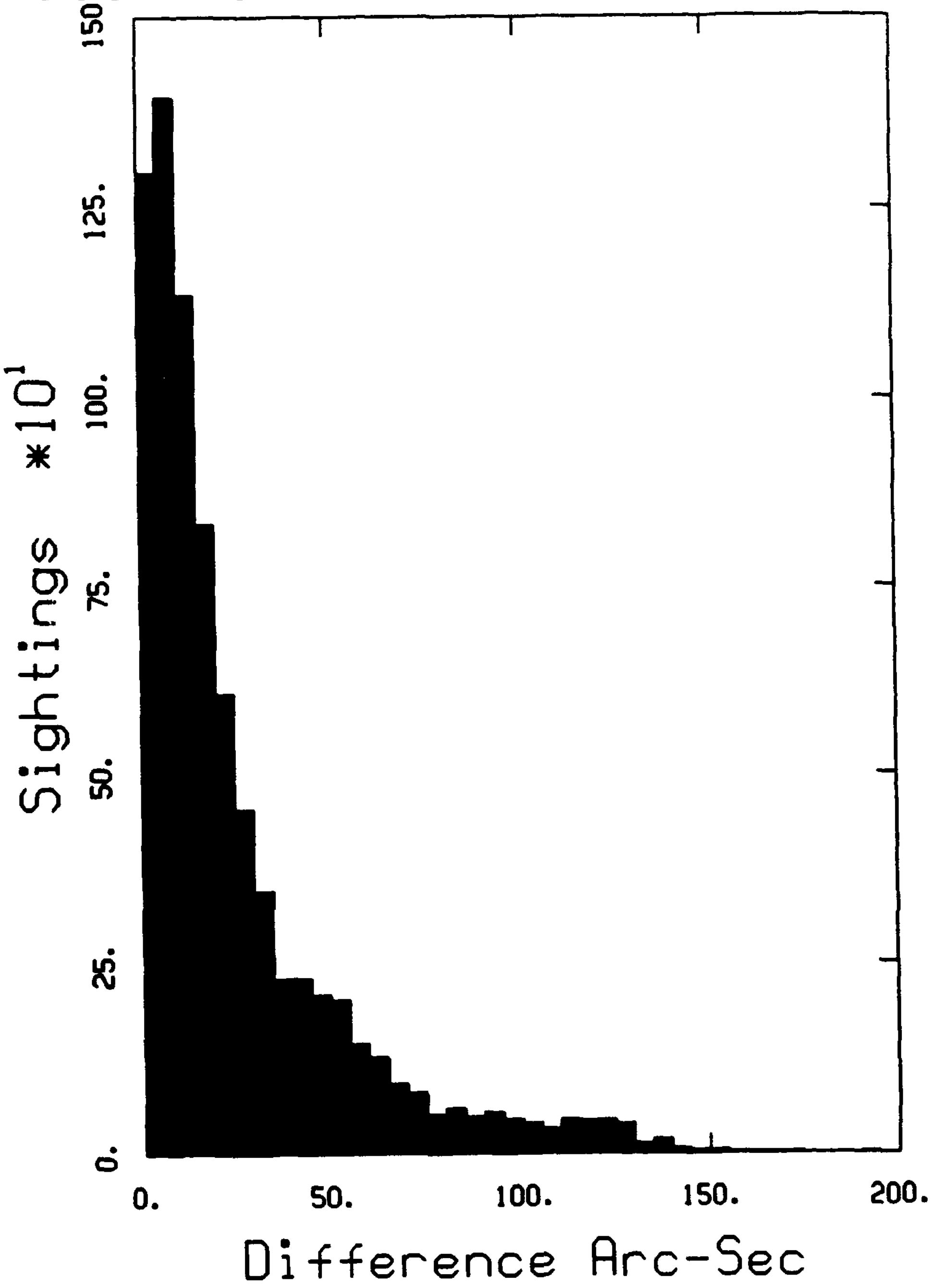

Figure 23a. Histogram for accepted sightings of IMPS asteroids with multiple sightings as a function of the difference in arc- sec between the predicted and observed position. This plot shows data from 7,924 sightings for 1,719 asteroids. The width of this distribution is determined by the effective angular sizes of the IRAS detectors as well as scan path uncertainty (*cf.*, Fig. 23b).

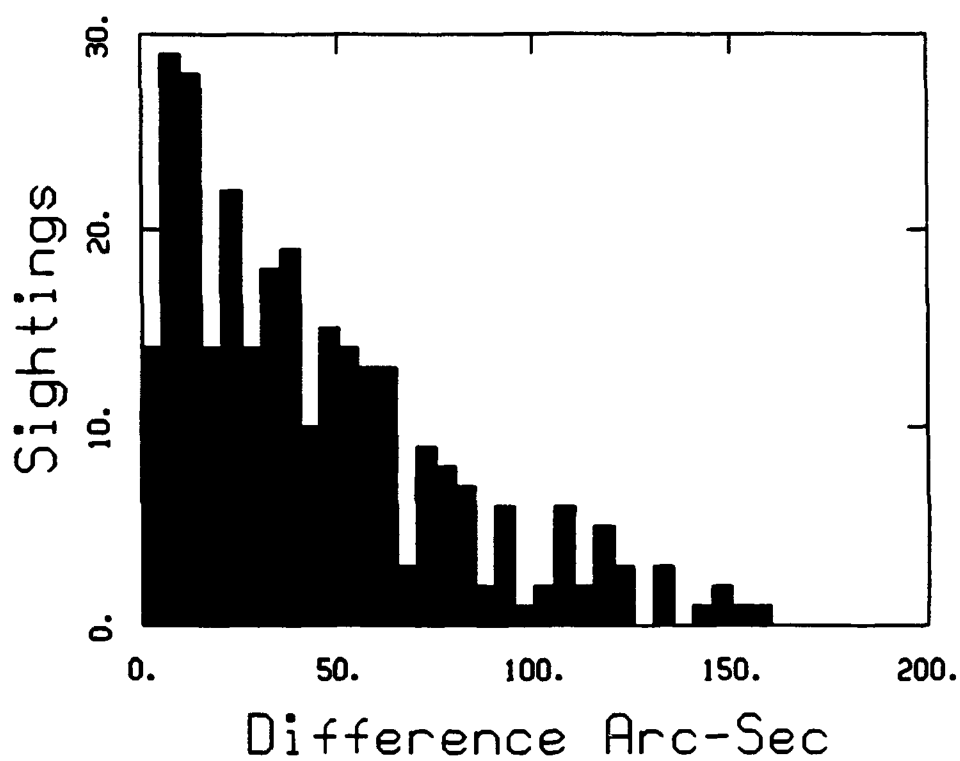

Figure 23b. Histogram for accepted sightings of 165 accepted IMPS asteroids with only a single sighting (but accepted data at multiple wavelengths) plus 120 IMPS singletons (with only one accepted observation at one wavelength) as function of the difference in arc-sec between the predicted and observed position. The lack of a strong peak near zero indicates that these associations have low accuracy (*cf.*, Fig. 23a).

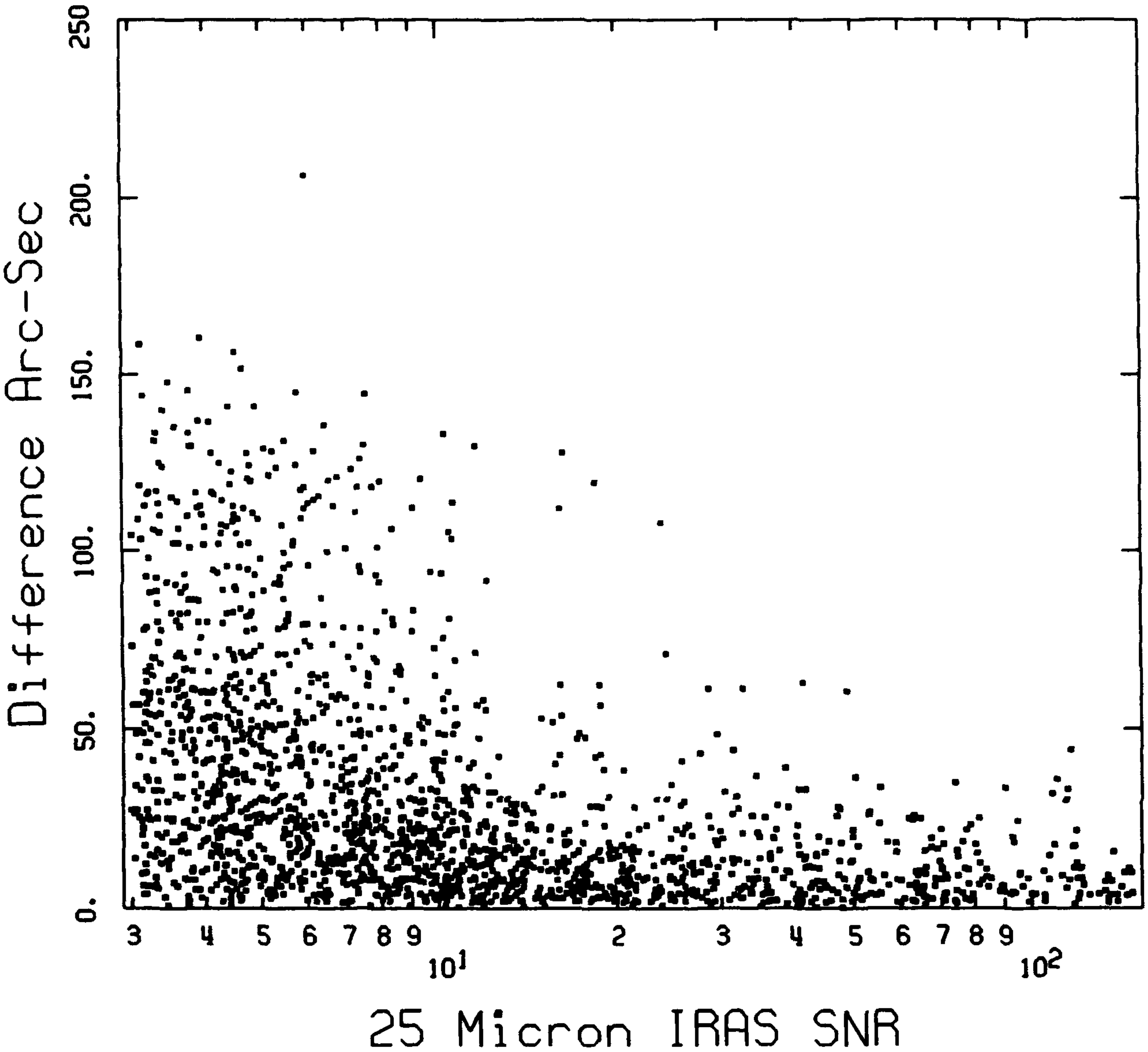

Figure 24a. Difference in arc-sec between the predicted and observed position vs. $\log_{10}$ of the (IRAS estimated) SNR for the brightest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. The IRAS 1983 survey cutoff is 3.0 for estimated SNR at 25 μm. The accuracy of asteroid associations decreases somewhat at low SNR. The SNR plotted is dithered (less than 0.1) around the IRAS estimate (*cf.*, Figs. 24b and 24c).

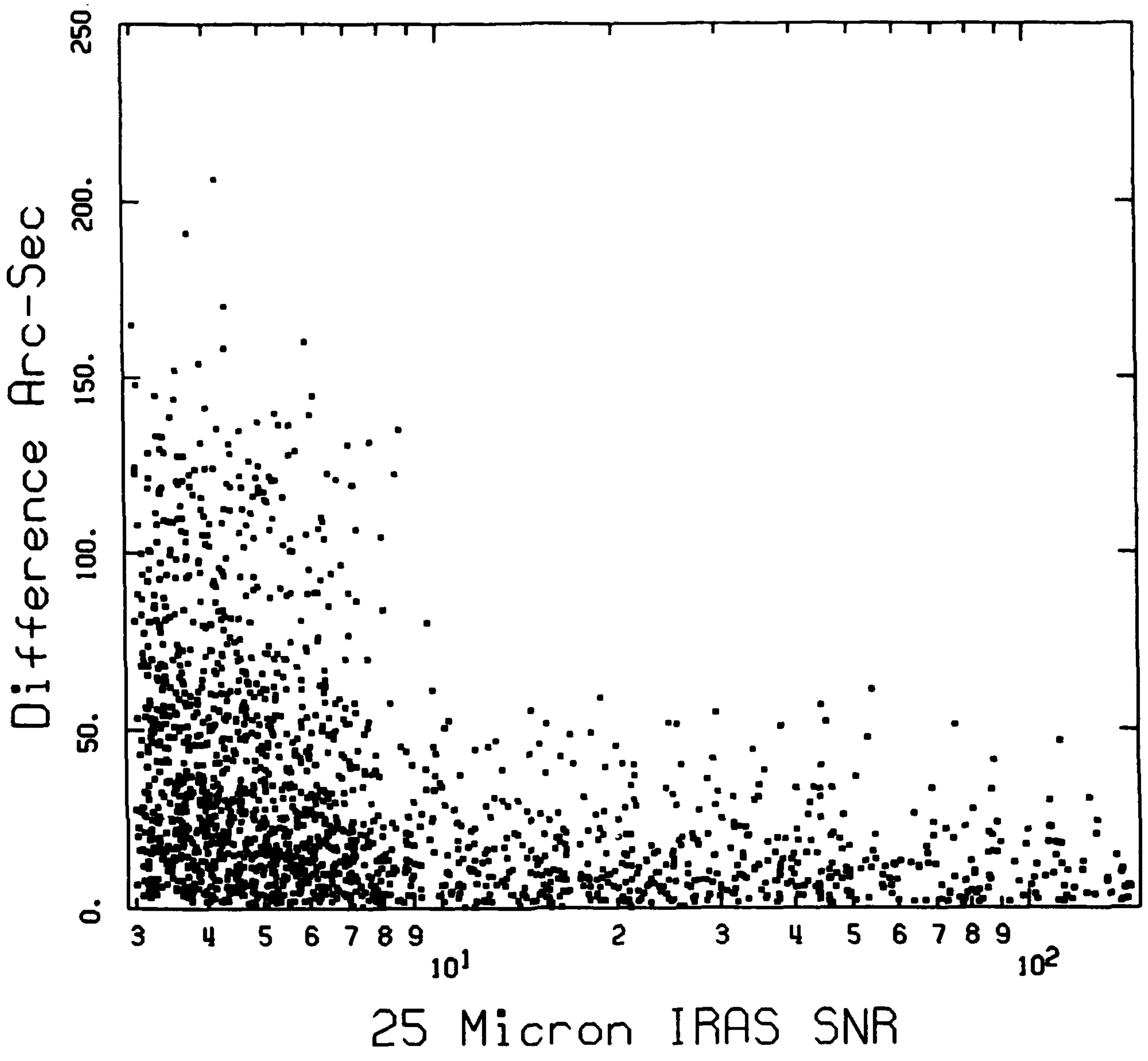

Figure 24b. Difference in arc-sec between the predicted and observed position vs. $\log_{10}$ of the (IRAS estimated) SNR for the faintest accepted sighting (excluding singletons) of each final accepted IMPS asteroid. The IRAS 1983 survey cutoff is 3.0 for estimated SNR at 25 μm. The accuracy of asteroid associations decreases somewhat at low SNR. The SNR plotted is dithered (less than 0.1) around the IRAS estimate (*cf.*, Figs. 24a and 24c).

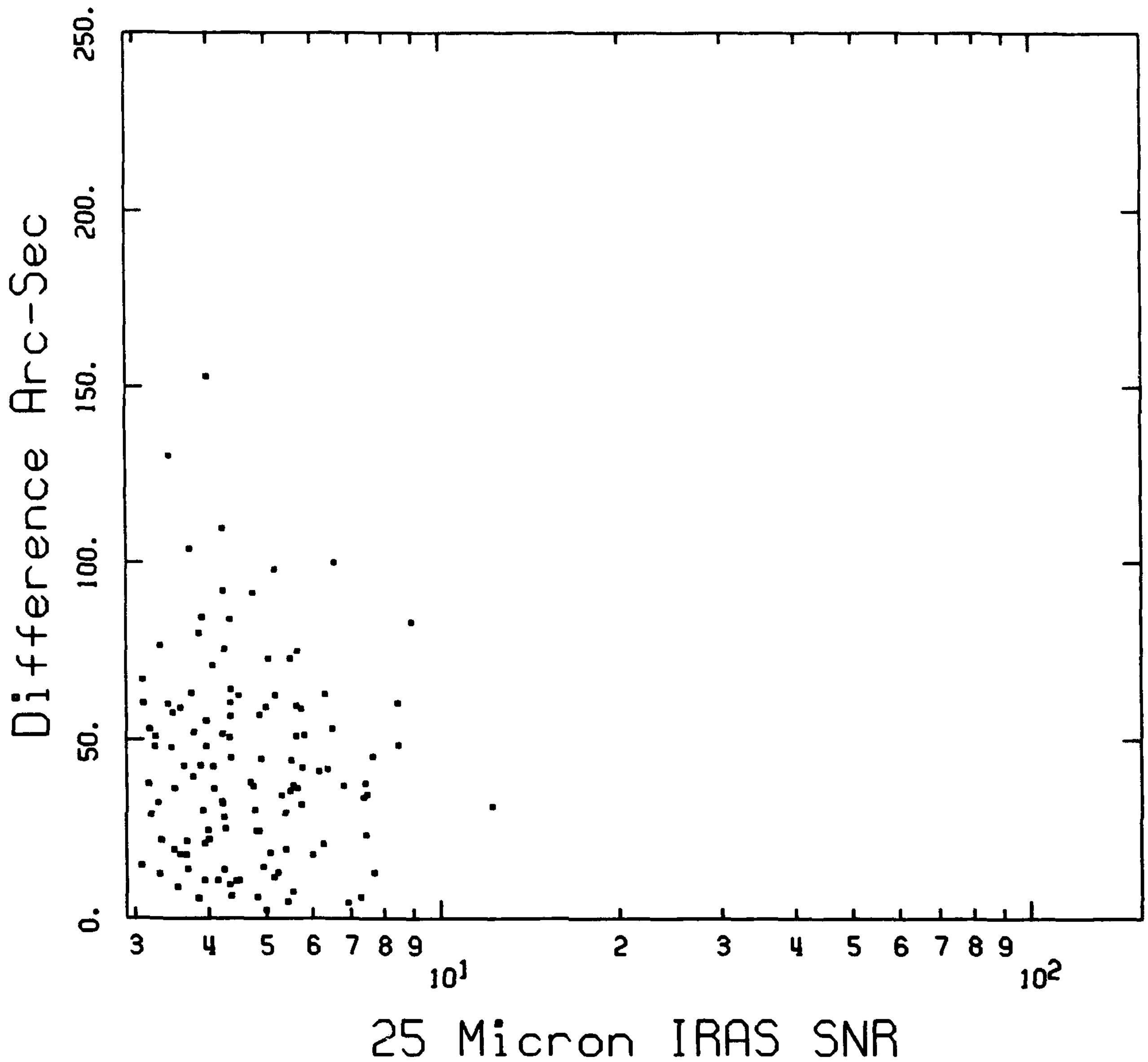

Figure 24c. Difference in arc-sec between the predicted and observed position vs. $\log_{10}$ of the (IRAS estimated) SNR for each final accepted IMPS singleton (with only one accepted observation at one wavelength) asteroid. The IRAS 1983 survey cutoff is 3.0 for estimated SNR at 25 µm. Singleton associations appear to have low accuracy. The SNR plotted is dithered (less than 0.1) around the IRAS estimate (*cf.*, Figs. 24a and 24b).

6.2 Accepted Asteroid Statistics

IMPS processing utilizes orbital elements for asteroids through number 4679 (ID Type 1) plus 2,632 additional sets each with data from two or more apparitions (ID Type 2). This is more than twice as many as were available at the 1985 epoch of the *IRAS Asteroid and Comet Survey, 1986*. IMPS accepts (or rejects) each candidate observation at each wavelength separately on the basis of various technical parameters. Individual observations are discussed in Chapter 5 IMPS Asteroid Associations. The diameters and albedos are then averaged for each asteroid (*cf.*, Chapters 4 and 7). The accepted asteroid statistics are summarized in Table 3.

6.2.1 Summary of IMPS Asteroids

Table 3. IMPS Accepted Asteroid Statistics Summary

Set	ID Type 1	ID Type 2	Total
Input orbital elements	4,679	2,632	7,311
Accepted single observations	94	26	120
Accepted multi-band asteroids	1,796	88	1,884
Total accepted asteroids	1,890	114	2,004
Associated but never accepted asteroids	865	599	1,464
Scanned but never associated asteroids	1,653	1,765	3,418
Never scanned asteroids	271	154	425

Orbital elements used by IMPS were updated through the end of 1990. ID Type 1 includes numbered asteroids through 4679 Sybil. 719 Albert is "lost" and therefore predictions for this asteroid were not generated. ID Type 2 asteroids include those 2,632 asteroids with orbital elements based upon astrometric observations from two or more apparitions. Such asteroids do not yet have elements of sufficiently high-quality to merit being assigned a permanent number. As expected, these have a significantly lower rate of detection by IRAS.

The 120 IMPS singleton asteroids each have only one accepted sighting in a single band (usually 25 μm). The 1,884 multi-band accepted asteroids have qualified

detections at more than one wavelength within a single sighting for over 80% of the accepted sightings.

Final albedos and diameters are generated for a total of 2,004 accepted asteroids as summarized in final products number 102 and 103 (the IMPS Albedos and Diameters and Singleton Catalogs). Note that IMPS singletons appear as sightings within the IMPS Sightings Data Base (final product number 108) but their summary product is separate. A total of 1,464 asteroids had all of their candidate associations rejected as summarized in the IMPS Reject Catalog (final product number 105). In addition, IMPS predicted scans of 3,418 asteroids which IRAS always failed to detect (usually because they were much too faint), as summarized in the IMPS Missed-Predictions Catalog (final product number 106). Some of these passed over dead 25 μm detectors or else had some other excuse as summarized in the IMPS Statistics Catalog (final product 104). IRAS never scanned 425 known asteroids during its sky survey. Thus about 94% of the asteroids in the IMPS sample of 7,311 were scanned during the IRAS mission. This compares with about 96% sampling predicted from the completeness model discussed in §8.1.

The Asteroid Data Analysis Subsystem (ADAS) used input orbital elements which were available in 1985 through identification number 3318. It successfully associated 1,790 of these plus 21 out of 135 additional asteroids with IRAS sources. Most asteroids with at least one accepted association by ADAS were also accepted by IMPS. Both surveys also agree well on most rejected and missed candidates. IMPS rejects 101 asteroids which were accepted by ADAS and misses another 109. This is probably due to a combination of a more stringent IMPS position match requirement and better updated orbital elements both of which discriminate against less reliable previous associations. The IMPS position match requirement is probably also responsible for IMPS missing more ADAS asteroids which failed other acceptance criteria than vice versa. IMPS accepted 1,678 low numbered asteroids compared to the 1,790 accepted by ADAS which means that IMPS is slightly less complete than ADAS in a relative sense although it has an approximately ten percent larger total output due to its inclusion of high numbered (and more ID type 2) asteroids. The tradeoff between completeness and reliability is discussed in §§6.3 and 6.4. Table 4 compares results for IMPS and ADAS for these 3,318 low numbered asteroids.

6.2.2 Comparison of IMPS to ADAS ID Type 1 Asteroids

Table 4. IMPS Versus ADAS Statistics Summary

	ADAS Accepted	ADAS Rejected	ADAS Missed	IMPS Totals
IMPS Accepted	1,580	92	6	1,678
IMPS Rejected	101	406	11	518
IMPS Missed	109	353	660	1,122
ADAS Totals	1,790	851	677	3,318

Note: IMPS accepted different sightings than ADAS for 18 of the 1,580 asteroids accepted by each with an identification number of less than 3318. Here the missed category includes both non-detections and asteroids which were never scanned.

6.2.3 Infrared Light Curves

Figure 25 presents the normalized largest difference in model geometric visual albedos vs. the $\log_{10}$ of the (IRAS estimated) SNR for each final accepted IMPS asteroid with two or more accepted values. The SNR scale has been expanded to show the change in the structure of the distribution of the data below a value of about SNR = 10. The observed trend continues smoothly beyond 300 for higher SNR values off the right hand side of this diagram. This range in albedos is directly related to the probability of light curve (PLC) parameter defined on page 42 (Equs. 28 - 30).

The reproducibility of the derived visual albedos for asteroids with multiple observations is an important issue for the quality of IMPS albedos. Poor reproducibility is partly due to a lack of simultaneous visual observations. Clearly, asteroids have light curves due to their irregular cross sections which may change with rotation as well as with aspect angle variation. Unfortunately, the light curves of more than 90% of even the ID Type 1 asteroids are not well determined. In any case, the phase of their light curves is generally not known for the epoch of the IRAS observations. Note that uncertainties (which may be quite large) in the absolute visual magnitudes used in the IMPS reduction are not expected to affect these relative differences. Some small

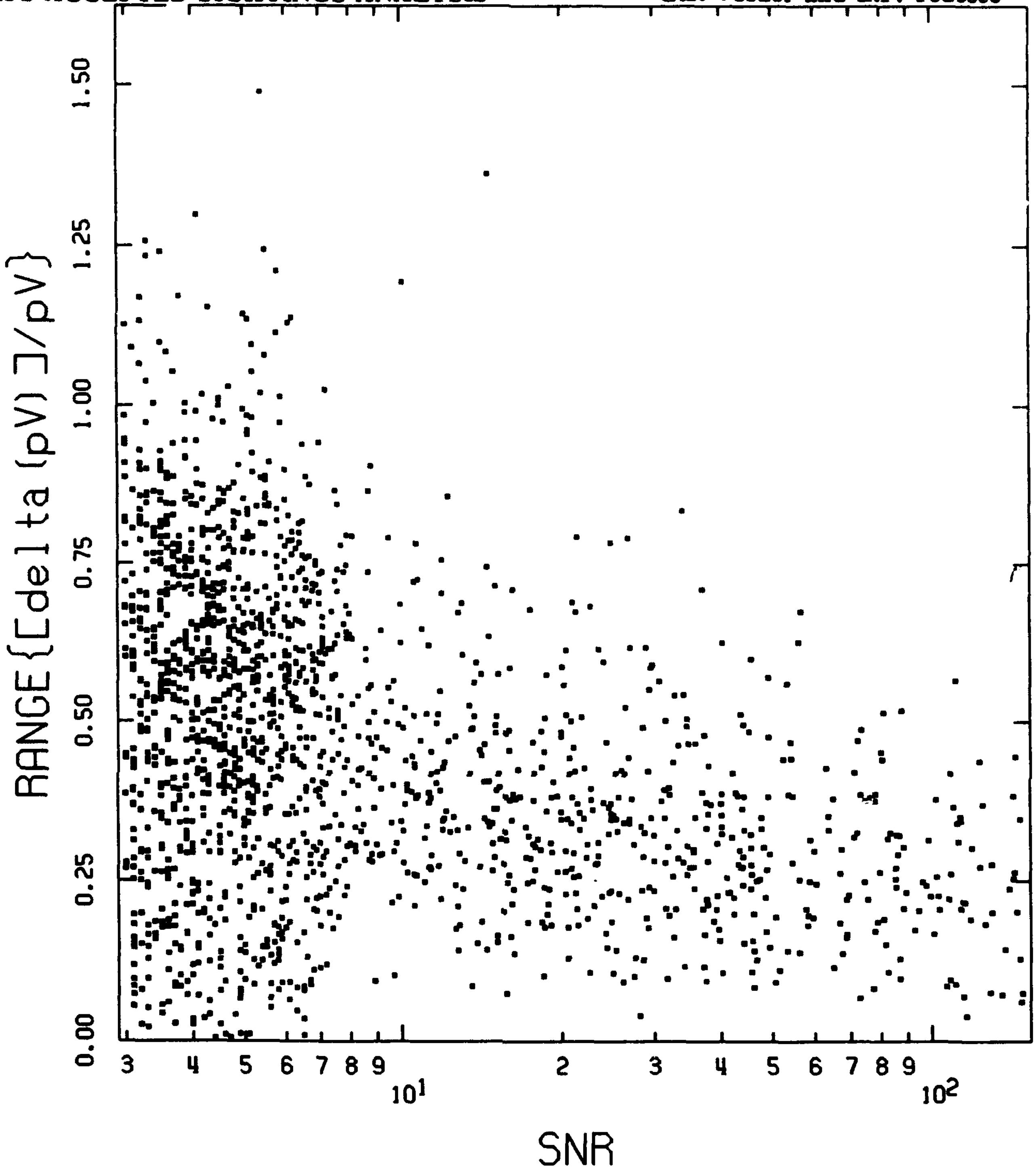

Figure 25. Normalized largest difference in model geometric visual albedos vs. $\log_{10}$ of the (IRAS estimated) SNR for each final accepted IMPS asteroid with two or more accepted values. All sightings of each asteroid with a range of albedo ratio larger than 0.75 have bit number 19 in the ASTATW status word set as a warning.

near-Earth asteroids are known to have light curves in excess of two magnitudes. Therefore, IMPS only flags asteroids with a range larger than an arbitrary threshold of 0.75 (fractional ratio), possibly between two wavelengths within a single sighting, as a warning by means of bit number 19 in AStatW but does not reject such cases out of hand (*cf.*, §6.5.1). These may include objects of future interest.

6.3 Completeness

The major limitation on the completeness of the IRAS Minor Planet Survey (IMPS) is the availability of asteroid orbital elements. (See §8.1 for a discussion of geometrical completeness.) These are, of course, biased against asteroids with faint visual magnitudes which are harder to discover. This results in a lack of small known asteroids, particularly in the outer belt. New asteroid discoveries also tend to be biased towards the ecliptic plane. Within these constraints, IMPS is relatively complete. One of its strengths is that IRAS scanned the whole sky with good coverage near the poles. Moreover, the infrared background is lower near the poles than in the ecliptic plane. Thus, in contrast to previous photographic asteroid surveys, IMPS introduces no additional dependence on ecliptic latitude. In addition, the infrared IMPS is sensitive to visually dark asteroids with low albedos. These predominate among all sizes of asteroids. IMPS may be slightly biased against the detection of asteroids with very high albedos which seem in fact to be relatively rare.

The IRAS data stream is limited by detector sensitivity and cutoff at an SNR of 3.0 by SDAS before asteroid processing within ADAS and thereafter the IRAS Minor Planet Survey (IMPS). Therefore, the amount of acceptable data rolls off for small faint asteroids as shown in Fig. 27 and reflected in the summary tables. The following test is one measure of the relative performance of IMPS processing. A subset of asteroids were identified which had independent indications of low albedos and were also expected to be bright in the infrared. In particular, those with taxonomic classifications of C, D, F or P from Tedesco *et al.* (1989 a,b), or Tholen and Barucci (1989), those with semimajor axis greater than 3.2 AU and/or those with low albedos from unpublished IRTF observations by Tedesco and Gradie were traced. The highest predicted flux density was calculated for the series of scans of each asteroid. IRAS did scan 24 Themis and 624 Hektor during SOPs 599 and 600 but failed to generate any data because SDAS asteroid tagging was inadvertently turned off for these SOPs.

This leaves 375 Ursula as the only asteroid missed by IMPS out of 100 predicted to be brighter than 10 Jansky during at least one scan. It happened to pass over a dead and a noisy 25 μm detector during two scans by IRAS. Ursula was, however, detected at 60 μm on both of these scan but, because of the requirement for at least a single

25 μm detection, failed to make it into the IRAS input data base, *i.e.*, CN28 or CN29. Since this can occur only for large dark asteroids (Ursula is a ~200 km C-class asteroid) this particular type of event is probably quite rare. This suggests that the IMPS system is over 99% efficient.

6.4 Reliability

Considerable effort has been made to insure that IMPS is as reliable as possible. The trade off between completeness and reliability has been discussed in detail in the *IRAS Asteroid and Comet Survey* (1986). In response to requests from the IRAS asteroid workshops, ADAS was tuned in order to optimize completeness. An effort was made in the *IRAS Asteroid and Comet Survey* (1986) to adapt the formalism used to estimate the completeness and reliability of the Point Source Survey as discussed in the *IRAS Explanatory Supplement, 1988*. Unfortunately, for the same four reasons enumerated on page 139 it is impossible to apply this formalism rigorously to asteroids. Instead, several checks have been made by examining the performance of the IMPS system near relevant boundaries amongst its parameters. The accuracy of these various reliability estimates can be assessed by comparing several different tests. In general, IMPS is significantly more reliable than the original IRAS Asteroid and Comet Survey. (See §8.2 for an additional discussion of reliability.)

6.4.1 Position Match

IMPS requires a closer correspondence between the predicted and observed asteroid position than ADAS. The relative fraction of all singletons (including those with a low flux status) with an albedo of less than 0.02 was used in order to tune an internal IMPS processing parameter to optimize the quality of position matches which were accepted. That is, the area of sky searched for a source to match with a predicted scan of an asteroid was narrowed until the relative fraction of singletons with albedos less than 0.02 ceased to decrease. This process utilized most of the system resources of a CDC Cyber mainframe computer at IPAC over a weekend for one run. After multiple iterations, this optimization lost only a few asteroids with multiple accepted associations and was seen to be successful for discriminating against spurious associations which tend to be picked up with increasing area. With such optimization for reliability, only two singletons, plus another asteroid with multiple associations, with albedos between 0.01 and 0.02 survived all other filters in order to be accepted by IMPS. The density of asteroids with multiple sightings and with a position score between 0.4 and 0.5 in Fig. 22a suggests the order of 0.98 for the estimated overall reliability for IMPS final accepted asteroid associations.

6.4.2 Infrared Color Window

As discussed by Veeder (1986) and in Chapter 5, IMPS applies a color window filter to candidate asteroid associations which have IRAS detections at more than one wavelength. This is a powerful tool for discrimination against background sources with temperatures much higher or lower than the range expected in the asteroid belt. Fortunately, the density of candidate associations near the boundary of this window falls to values much lower than the central peak of the asteroid distribution.

Asteroid associations with accepted data at all three short wavelengths are the most reliable subset within IMPS because they have the additional redundancy of multiple detections per sighting, which also results in the most accurate reconstructed IRAS positions, tend to have high SNR and are consistently observed almost every time they are predicted (*i.e.*, FOR near unity). Asteroids with detections at two wavelengths (*i.e.*, either 12 and 25 μm or 25 and 60 μm) retain these advantages to a lesser degree. Veeder (1986) concludes that a good color measurement insures ~0.99 reliability. By implication, singletons are expected to be somewhat less reliable in this context (*i.e.*, probably less than 0.98). This is another justification for the rejection of singletons with a flux status of less than 5. Note that even accepted singletons in the IMPS Singleton Catalog (final product number 103) are not expected to be as reliable as the accepted asteroids in the IMPS Albedos and Diameters Catalog (final product number 102) all of which have multiple observations.

6.4.3 Non-physical Low Albedos

An important check on the credibility of IMPS results is the lack of asteroids with unphysical low values of derived visual albedos. Some of these may result from poor input visual magnitudes. Most sources of spurious noise add excess flux density and thus tend to lower the derived albedo. An example is that of a faint asteroid whose flux density is predicted to be slightly below the IRAS cutoff, but is unfortunately confused with a stationary background source slightly above the cutoff. No genuine visual albedo less than 0.01 has yet been found for any asteroid which has been previously well observed. IMPS did make 10 otherwise successful associations which had unacceptable derived albedos below 0.01 and are therefore rejected. IMPS rejected 173 low albedo associations for other reasons as well which implies a reliability of more than: 1 - 10/173 (~0.94) in this context.

6.4.4 System Performance for Faint Asteroids

The reliability of a survey such as IMPS decreases near its SNR limiting cutoff. Faint asteroids may be easily confused with the large number of faint stationary background sources. At low flux densities, asteroid associations are more likely to have low position scores due to large differences between predicted and observed positions and a low rate of successful detections which results in a higher fraction of single to multiple asteroid sightings. (Almost all accepted singletons have low SNR.) A special effort has been made to identify 45 asteroids which were scanned by IRAS but which are also predicted to have a maximum possible flux density at 25 μm of less than 0.14 Jansky. These are flagged by bit number 11 in AStatW. This limit was chosen to insure that these asteroids are not expected to be detected during IMPS processing. In fact IMPS associates none of this subset with spurious noise or background sources. In a formal sense this result is consistent with a perfect reliability of unity. If the next brightest one is spurious, then a lower bound on the reliability may be estimated as: 1 - 1/46 (about 0.98) in this context.

6.5 Caveats

6.5.1 Cautionary flags

The Asteroid Status Word (AStatW) is a 32 bit code word generated for each sighting (whether accepted or rejected) as part of IMPS processing. AStatW is explicated in Table 23, page 244. Flags which are set if a sighting fails a particular acceptance criteria are discussed in §5.2.3. The following AStatW flags are set as a warning of a potential problem but no processing decisions are made based on these:

Bit 1 is set if the asteroid sighting has a parameter $\{[\log_{10}(\text{SCORE}) - 3]/6\}$ less than 0.5 (*cf.*, Known Object Prediction, §4.3.4.B). Sightings with a value less than 0.4 are also rejected. This parameter is a measure of the difference between the predicted and observed positions for an asteroid association (*cf.*, Fig. 22a, 22b, and 22c).

Bit 7 is set if an asteroid observation within a sighting has a ratio of observed to predicted flux density at 25 μm is either less than 0.3 or greater than 3.0 (*cf.*, Fig. 7a and 7b). This is a range check.

Bit 12 is set for all sightings of each asteroid if the rate of successful detections (*i.e.*, the fraction observed ratio FOR [defined as the number of sightings used divided by the number used plus the number missed)] is less than 0.3 (*cf.*, Figs. 20 and 21). This parameter is a measure of consistent system performance.

Bit 19 is set for all sightings of an accepted asteroid if the ratio {[maximum--minimum]/[(maximum+minimum)/2]} is greater than 0.75 among all derived albedos used in the final average for each asteroid. This parameter is a measure of apparent infrared lightcurves. This is related to the probability of lightcurve PLC defined on page 42 (Equs. 28 - 30).

Bit 30 is set if a sighting is associated with more than one asteroid prediction. These are the very few cases of asteroid-asteroid confusion.

6.5.2 100 μm Observations

IRAS did detect many of the brighter asteroids at 100 μm. IMPS-derived diameters and albedos are listed in sighting products (*e.g.*, the IMPS Sightings Data Base, final product number 108) for relative comparison with results at shorter wavelengths but are not used in any average summary products (*e.g.*, the IMPS Albedos and Diameters Catalog, final product number 102). The sky background at 100 μm is very non-uniform due to infrared "cirrus" which is strongly correlated with galactic latitude as well as individual giant molecular clouds such as Orion. The IRAS absolute calibration at 100 μm was based on special observations of a few bright asteroids and extrapolations of the "standard" thermal model from 60 to 100 μm. Thus, the absolute values of the asteroid results at 100 μm cannot be independently determined.

6.5.3 Photographic Absolute Magnitudes

Many of the input absolute magnitudes (H) from the IMPS Ground-Based Data Catalog (final product 107) are derived from estimates made from images, usually trailed, on photographic plates rounded to 0.5 or 1 mag. This creates the saw tooth effect seen in Fig. 27 which is more severe for faint asteroids. The influence of this aliasing propagates through IMPS processing into the final products. The linear ridges in Fig. 32a (*cf.*, Veeder, 1986 and Veeder *et al.*,1989b) are one such artifact.

6.5.4 Extreme Albedos

No genuine visual geometric albedo less than 0.01 has yet been found for any asteroid which has been well observed. IMPS asteroids with derived model albedos this low are rejected (*cf.*, §6.4.3) but even those faint asteroids with albedos less than ~0.02 may suffer from noise hits, poor input visual magnitudes, lightcurve and/or aspect angle variation. Asteroids with very high albedos are apparently rare and an infrared survey is slightly biased against them. Therefore, those faint asteroids with derived model albedos greater than approximately 0.5 may also suffer from poor input visual magnitudes, lightcurve and/or aspect angle variation.

6.5.5 Single Observations

The IMPS Singleton Catalog (final product 103) contains data for 120 asteroids which have accepted data for only one band (usually 25 μm) in a single sighting. By definition these data are not redundant. It is not possible to apply obvious consistency checks on observed flux density which are possible for those which have multiple observations (perhaps at a single wavelength) nor is it possible to check apparent color temperature without observations at more than one wavelength. Thus, these singletons are expected to have lower reliability than those asteroids with multiple observations in the IMPS Albedos and Diameters Catalog (final product 102).

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Chapter 7

RESULTS FROM THE IRAS MINOR PLANET SURVEY

Glenn J. Veeder and Edward F. Tedesco

This chapter reviews the derived characteristics of the reliably-observed (i.e., "accepted") asteroids, such as their albedo and size distributions.

The Infrared Astronomical Satellite (IRAS) detected just over 40% of the asteroids with reliable orbital elements as of the start of data processing. The IRAS Minor Planet Survey (IMPS) uses IRAS data from observations of 2,004 asteroids to derive diameters, albedos and other related parameters which are summarized in the IMPS Albedos and Diameters Catalog (final product number 102). Asteroids which have only one accepted observation (usually at 25 μm) in a single sighting (and which we refer to as "singletons") are summarized in the IMPS Singleton Catalog (final product number 103). The IMPS survey updates the *IRAS Asteroid and Comet Survey, 1986*; see also Matson *et al.*, 1989) primarily by the input of more reliable and additional orbital elements and more credible visual absolute magnitudes. Results from this survey are discussed by Veeder *et al.* (1989b). Accepted sightings are discussed in Chapter 6; analysis presented there (in §6.4) indicates that IMPS is significantly more reliable than the *IRAS Asteroid and Comet Survey, 1986.*

Figure 26 displays a histogram for 1,890 accepted IMPS asteroids (including singletons) as a function of identification number. The first panel includes asteroids with an identification number of less than 4,680 binned by hundreds. The ordinate values are equivalent to a straight percentage of the number listed in final products 102 and 103 for each interval. Data for an additional 114 IMPS ID Type 2 asteroids are shown in the second panel.

The IMPS processing system generates accepted associations for approximately 90% of the bright low numbered asteroids. This percentage decreases smoothly to about 15% of the higher numbered asteroids because they are also systematically fainter. IMPS processing generates accepted associations for about 5% of the asteroids with available elements which are not yet numbered. The orbital elements of these should

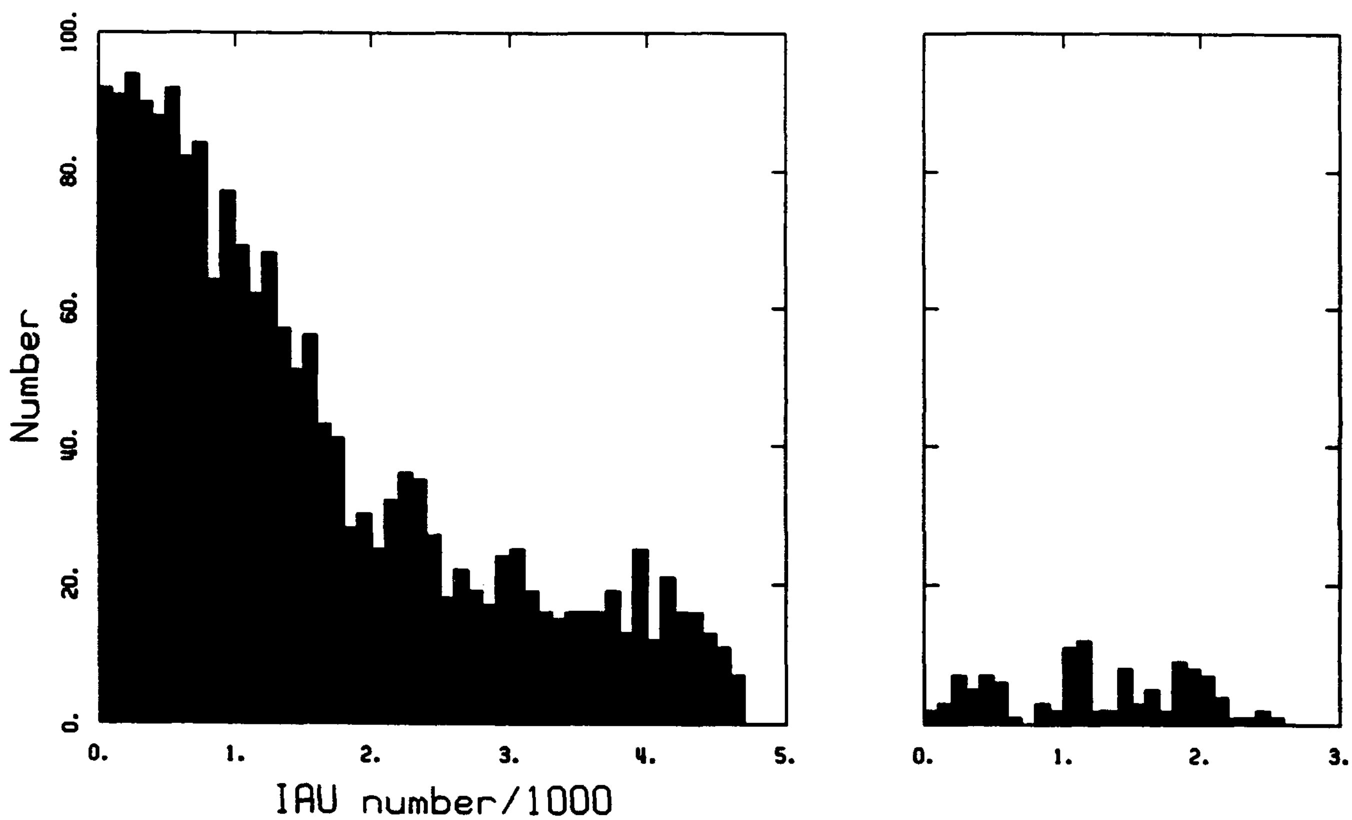


Figure 26. Number histogram for 1,890 final accepted IMPS asteroids (including singletons) with ID type 1 numbers less than 4680 binned by number. The ordinate values are equivalent to a straight percentage. An additional 114 IMPS ID type 2 asteroids are plotted in the second panel.

improve with future astrometry after which they will also qualify for permanent numbers. Thus, on the order of 10% of asteroids recently numbered beyond 4680 can be expected to have accessible IRAS data.

Figure 27 displays histograms for input asteroids (no fill) and for 2,004 final accepted IMPS asteroids (solid fill) as a function of absolute visual H magnitudes. Note that these data are binned on a log scale. Many photographic estimates for faint asteroids are only to the nearest magnitude which results in an obvious alias. The influence of this aliasing propagates through IMPS processing (*e.g.*, into Fig. 32a). The distribution of input magnitudes peaks near H = 13 and the distribution of accepted IMPS asteroids peaks near H = 11. The bias against the discovery and later IRAS detection of faint asteroids is clearly evident with increasing magnitude.

7. 1 Albedo Correlation with Visual Color

Figure 28 plots the $\log_{10}$ of the average model geometric visual albedo against the B-V color in magnitudes for each final accepted IMPS asteroid (including singletons). Asteroids have bimodal distributions in both albedo and color which are well known (*cf.*, Chapman *et al.*, 1975; Zellner and Gradie, 1976a,b; Gradie, 1978; Tedesco, 1979; Zellner, 1979; Gradie *et al.*, 1979; Tholen and Barucci, 1989; Tedesco *et al.*, 1989a,b). In particular, most moderate-albedo asteroids are also red and most dark asteroids have neutral visual colors. The corresponding bimodality of the derived visual albedo distribution for all large IMPS asteroids is also seen in Fig. 32a.

Figure 29 plots the $\log_{10}$ of the average model geometric visual albedo against the U-V color in magnitudes for each final accepted IMPS asteroid (including singletons). This diagram updates the observed asteroid albedo-color distribution as shown in previous work (Zellner 1979; Gradie *et al.* 1979; Tedesco *et al.* 1989c) via additional IMPS albedos. This diagram is somewhat more diagnostic for spectral classification than Fig. 28 although less high quality U photometry is available than for B. High albedo, neutral color, E taxonomic class asteroids are relatively rare. Dark (neutral) taxonomic class asteroids such as C, D, F and P are found in the concentration towards the lower left in Figs. 28 and 29. Visually red S class asteroids predominate in the concentration towards the upper right in Figs. 28 and 29. A and D class asteroids also may be red at near infrared (JHK) wavelengths.

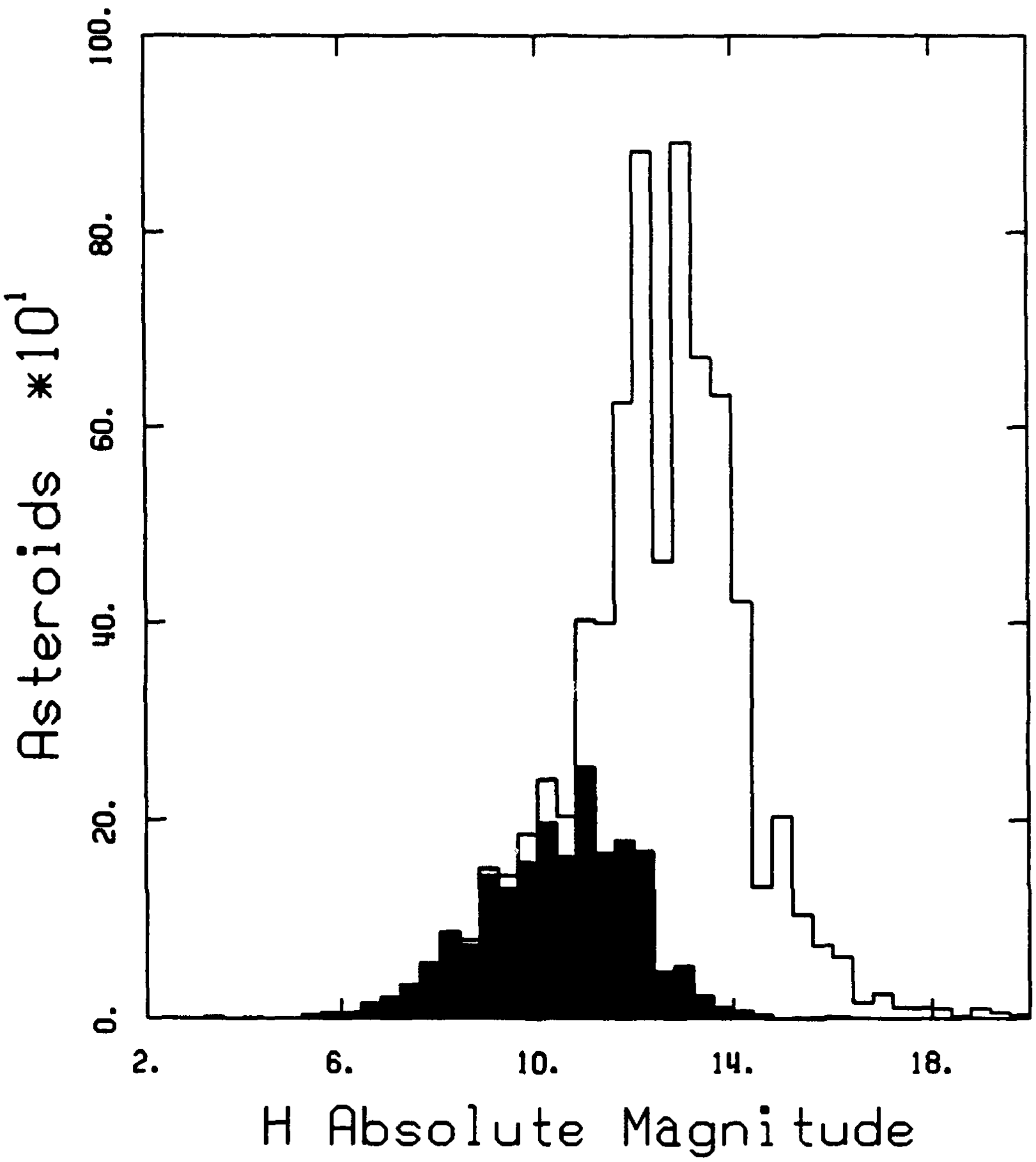


Figure 27. Histogram for input asteroids (unshaded bars) and 2,004 final accepted IMPS asteroids (shaded bars) as a function of absolute visual H magnitude. Many photographic estimates for faint asteroids are only to the nearest magnitude.

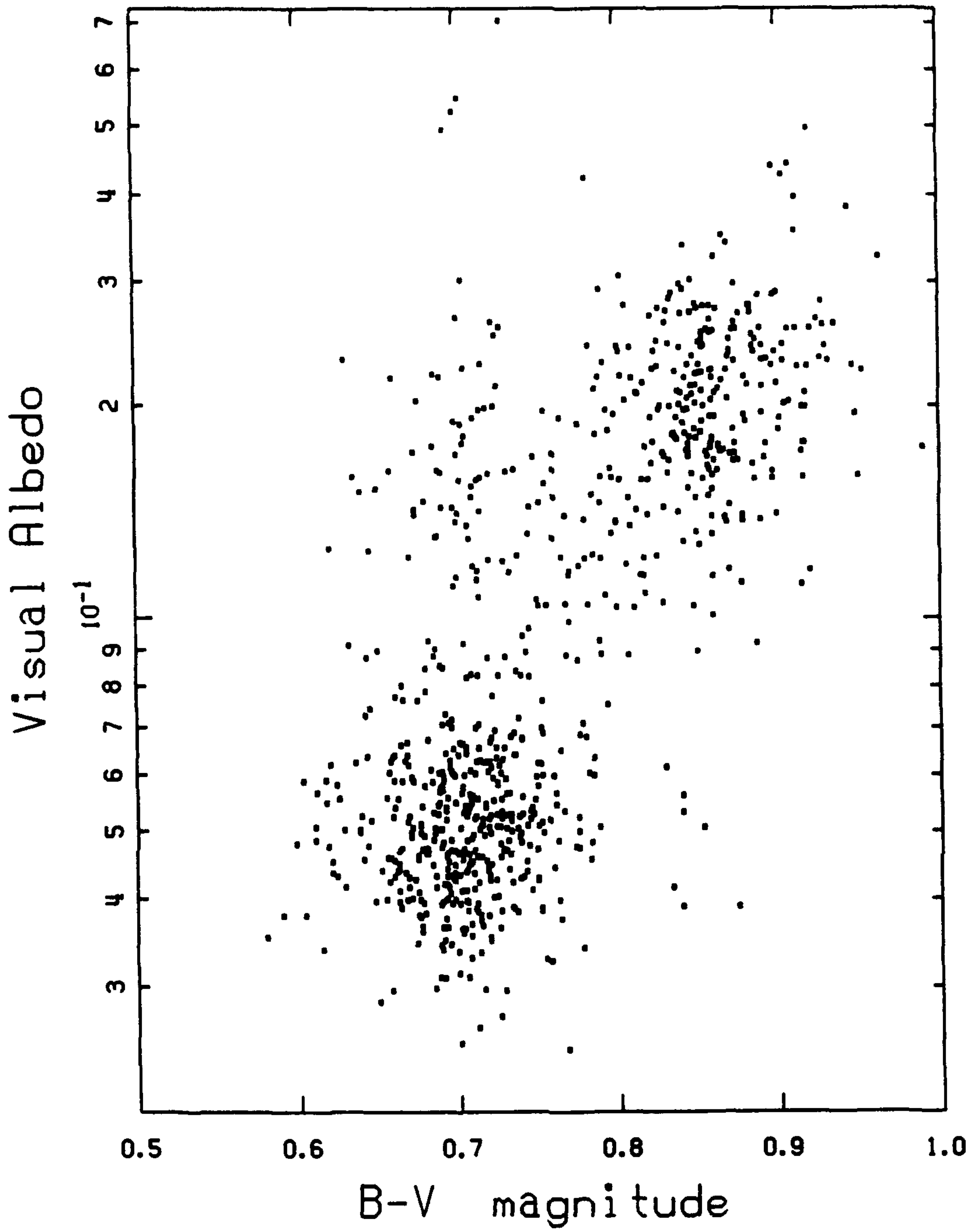


Figure 28. Log_{10} of the average model geometric visual albedo vs. B-V color in magnitudes for each final accepted IMPS asteroid (including singletons). The S taxonomic class predominates in the concentration towards the upper right. Dark neutral taxonomic class asteroids such as C, D, F and P are found in the concentration towards the lower left.

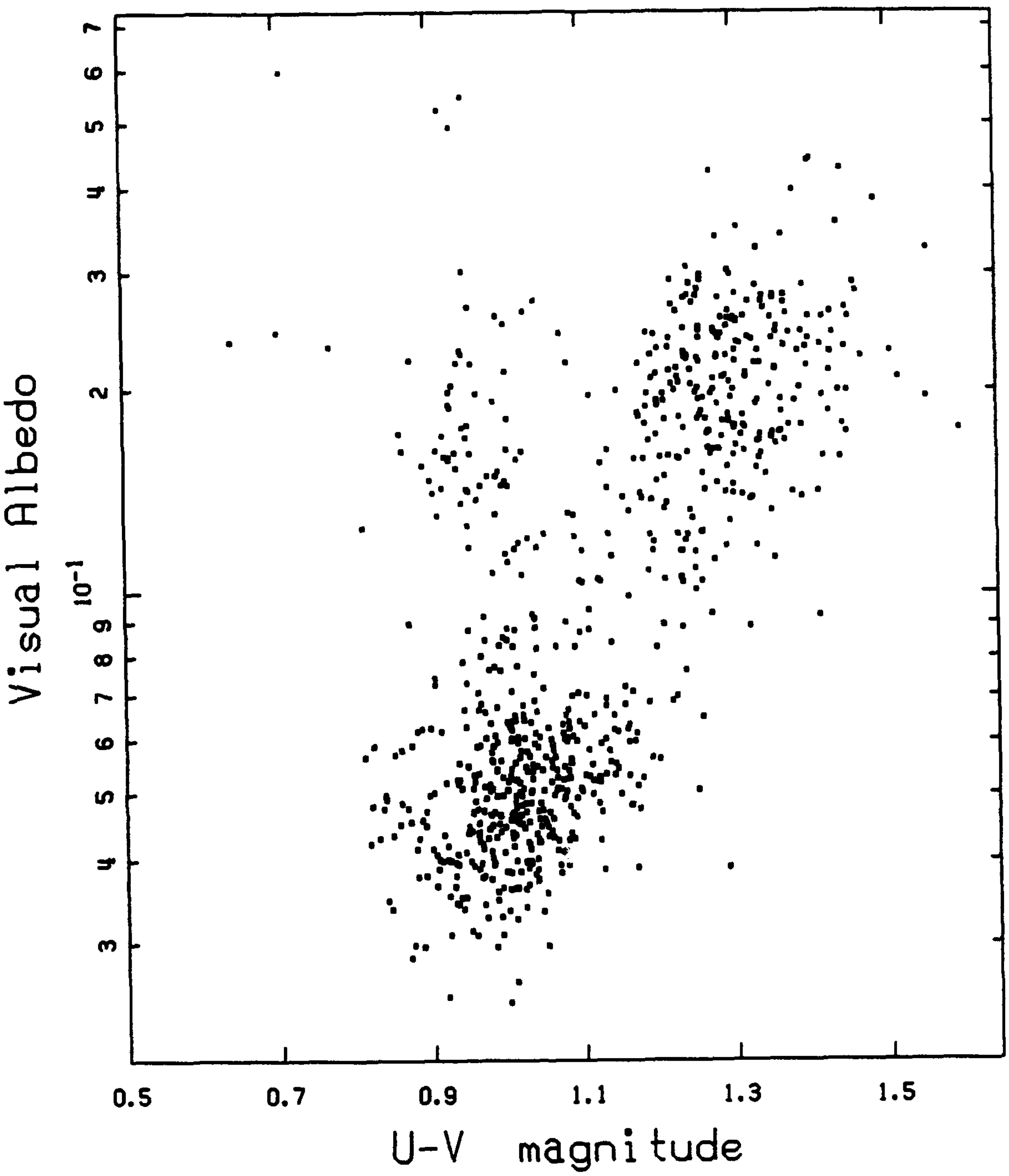


Figure 29. Log_{10} of the average model geometric visual albedo vs. U-V color in magnitudes for each final accepted IMPS asteroid (including singletons). The S taxonomic class predominates in the concentration towards the upper right. Dark neutral taxonomic class asteroids such as C, D, F and P are found in the concentration towards the lower left.

7. 2 Albedo Distribution with Semimajor Axis

Figures 30a and 30b plot the $\log_{10}$ of the average model geometric visual albedo against the semimajor axis in AU for each final accepted IMPS asteroid (including singletons) with a model diameter greater than and less than 40 km. The albedo frequency distribution is peaked near a value of 0.05 with a secondary peak near a value of 0.2 for large asteroids (*cf.*, Fig. 32a). The E taxonomic class asteroid 44 Nysa has the highest derived albedo for large asteroids. The inner belt also shows some deficiency for albedos near 0.12 among small asteroids. Small asteroids in the central main belt appear to have a smooth albedo distribution. Asteroids in the prominent dynamical Eos family at 3 AU have albedos near 0.15 and also tend to be small as seen in Fig. 30b. Most outer belt asteroids detected by IMPS (beyond 3.2 AU) have low albedos as seen in Fig. 30a. The dark Themis dynamical family dominates the outer main belt near 3.1 AU in both Figs. 30a and 30b. Large asteroids in the Themis region peak near a derived visual albedo of about 0.05 whereas small asteroids in the Themis region appear to peak near a somewhat larger 0.07 value. Note that IRAS detected only large (diameter greater than 50 km) dark Trojans as seen in Fig. 30a. The classic Kirkwood gaps are very evident in the semimajor axis structure seen across the asteroid belt.

7. 3 Size Distribution with Semimajor Axis

Figures 31a and 31b plot the $\log_{10}$ of the average model diameter in km against the semimajor axis in AU for each final accepted asteroid (including singletons) for IMPS asteroids with less than and more than 0.1 model geometric visual albedos (*cf.*, Veeder *et al.* 1989a). The set of available orbital elements is incomplete for small (diameter less than ~20 km) asteroids in the outer belt due to the bias against their discovery. The analogous breakpoint is near a diameter of ~10 km in the inner belt. The dark Themis dynamical family dominates the outer main belt near 3.1 AU in Fig. 31a. Note that IRAS detected only large (diameter greater than 50 km) dark Trojans. Asteroids in the prominent Eos family at 3 AU tend to be small and have moderate albedos as seen in Fig. 31b. The classic Kirkwood gaps are very evident in the semimajor axis structure seen across the asteroid belt.

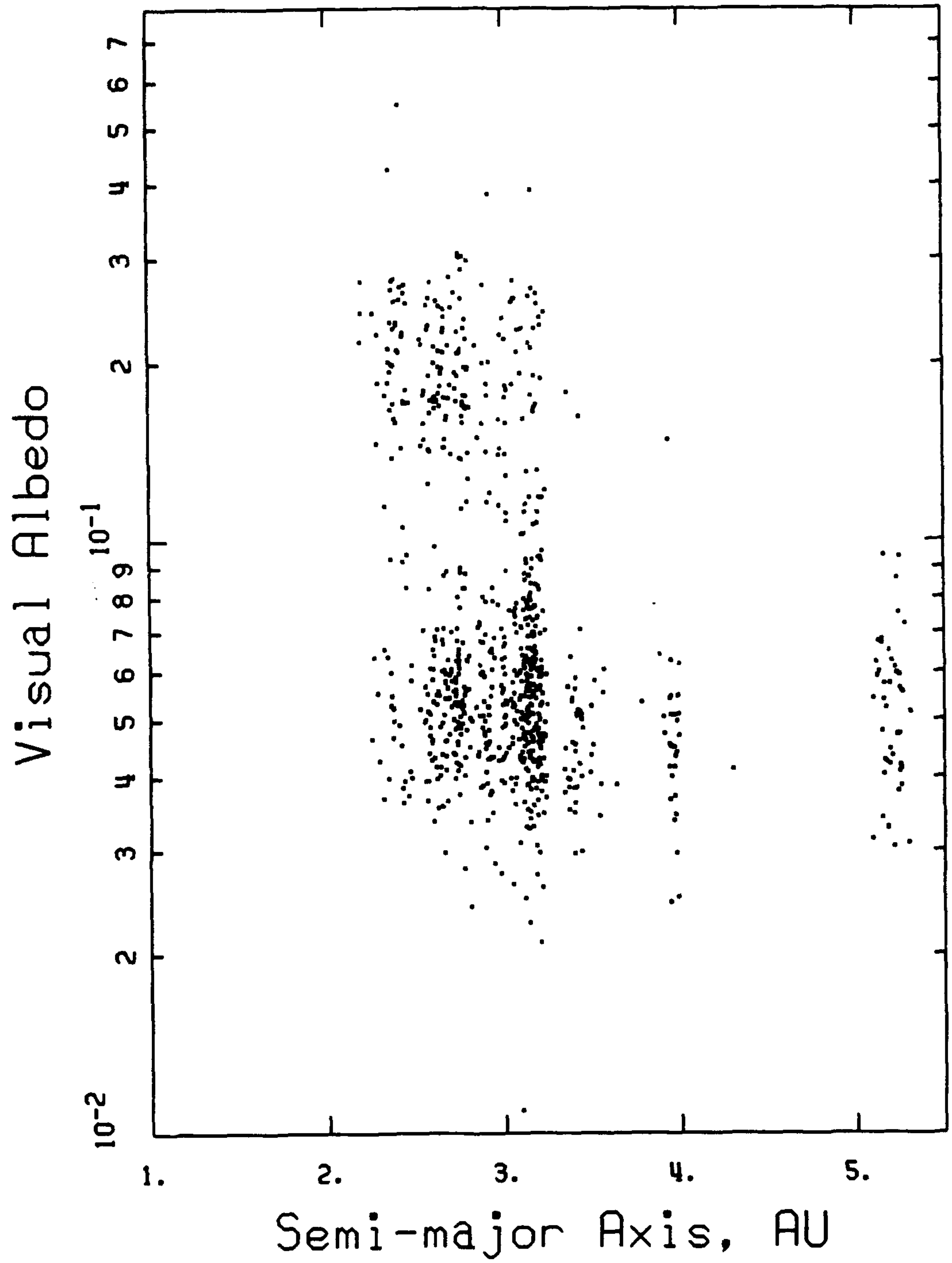


Figure 30a. Log_{10} of the average model geometric visual albedo vs. semimajor axis in AU for each final accepted IMPS asteroid (including singletons) with a model diameter greater than 40 km. The albedo frequency distribution is peaked near a value of 0.05 with a secondary peak near a value of 0.2 for large asteroids (*cf.*, Fig. 33a). Asteroid 44 Nysa has the highest derived albedo on this plot. Most outer belt asteroids detected by IMPS (beyond 3.3 AU) have low albedos (*cf.*, Fig. 30b).

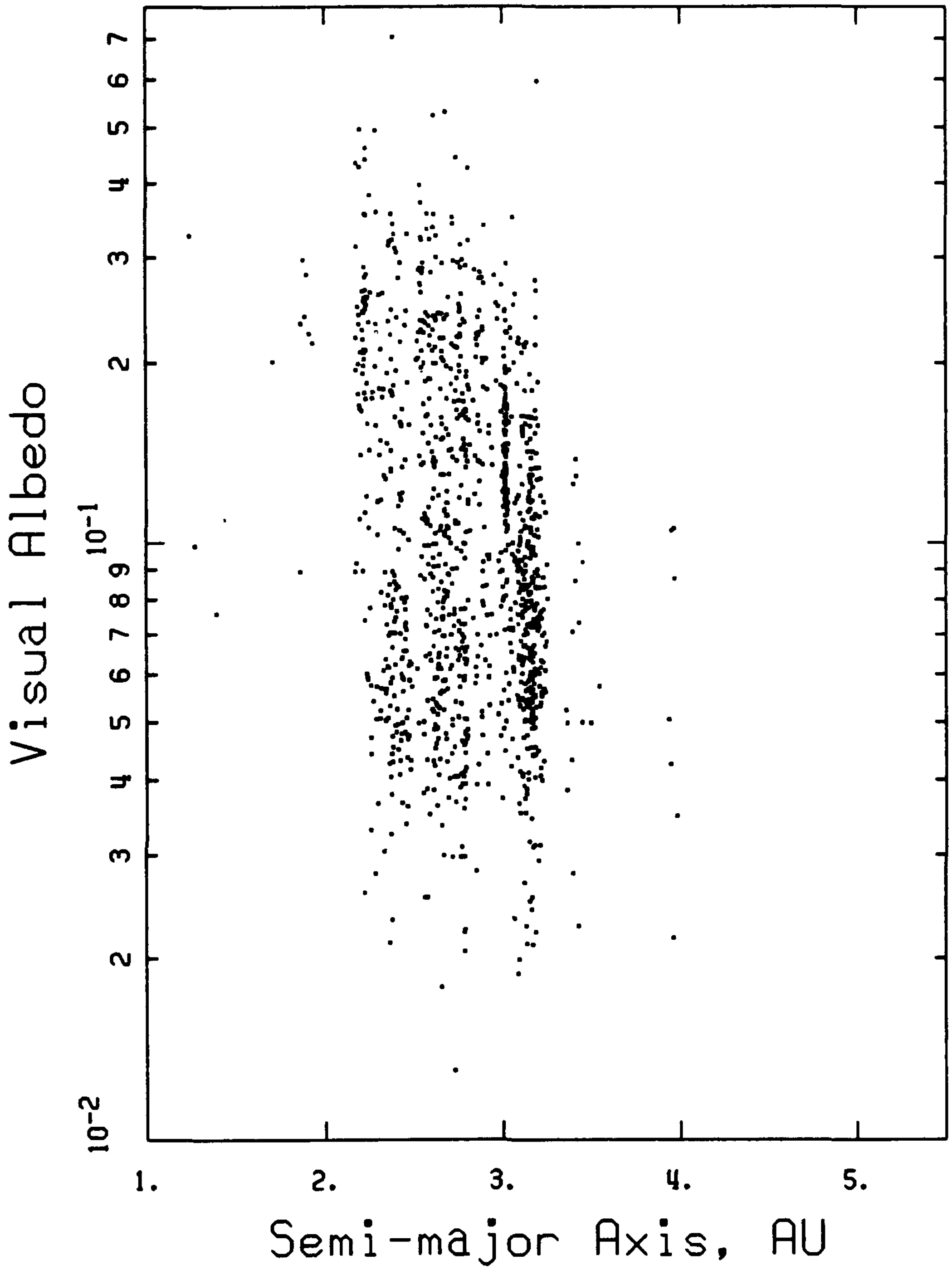


Figure 30b. Log_{10} of the average model geometric visual albedo vs. semimajor axis in AU for each final accepted IMPS asteroid (including singletons) with a model diameter less than 40 km. Asteroids in the prominent Eos family at 3 AU have albedos near 0.15; but IRAS did not detect any small Trojans (*cf.*, Fig. 30a).

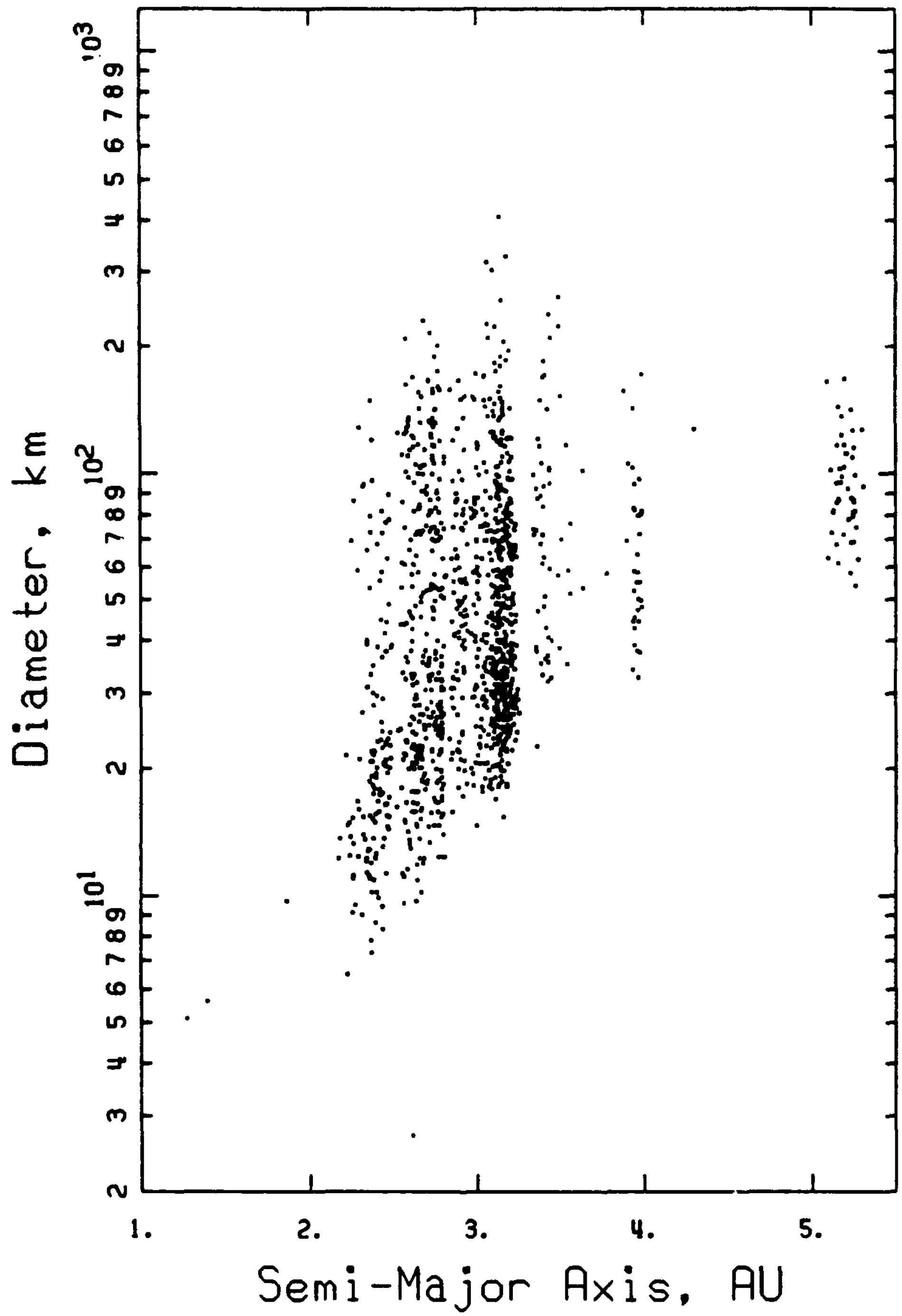


Figure 31a. Log_{10} of the average model diameter in km vs. semimajor axis in AU for each final accepted asteroid (including singletons). Data for IMPS asteroids with a model geometric visual albedo of less than 0.1 are plotted. The set of available orbital elements is incomplete for small asteroids in the outer belt (*cf.*, Fig. 31b).

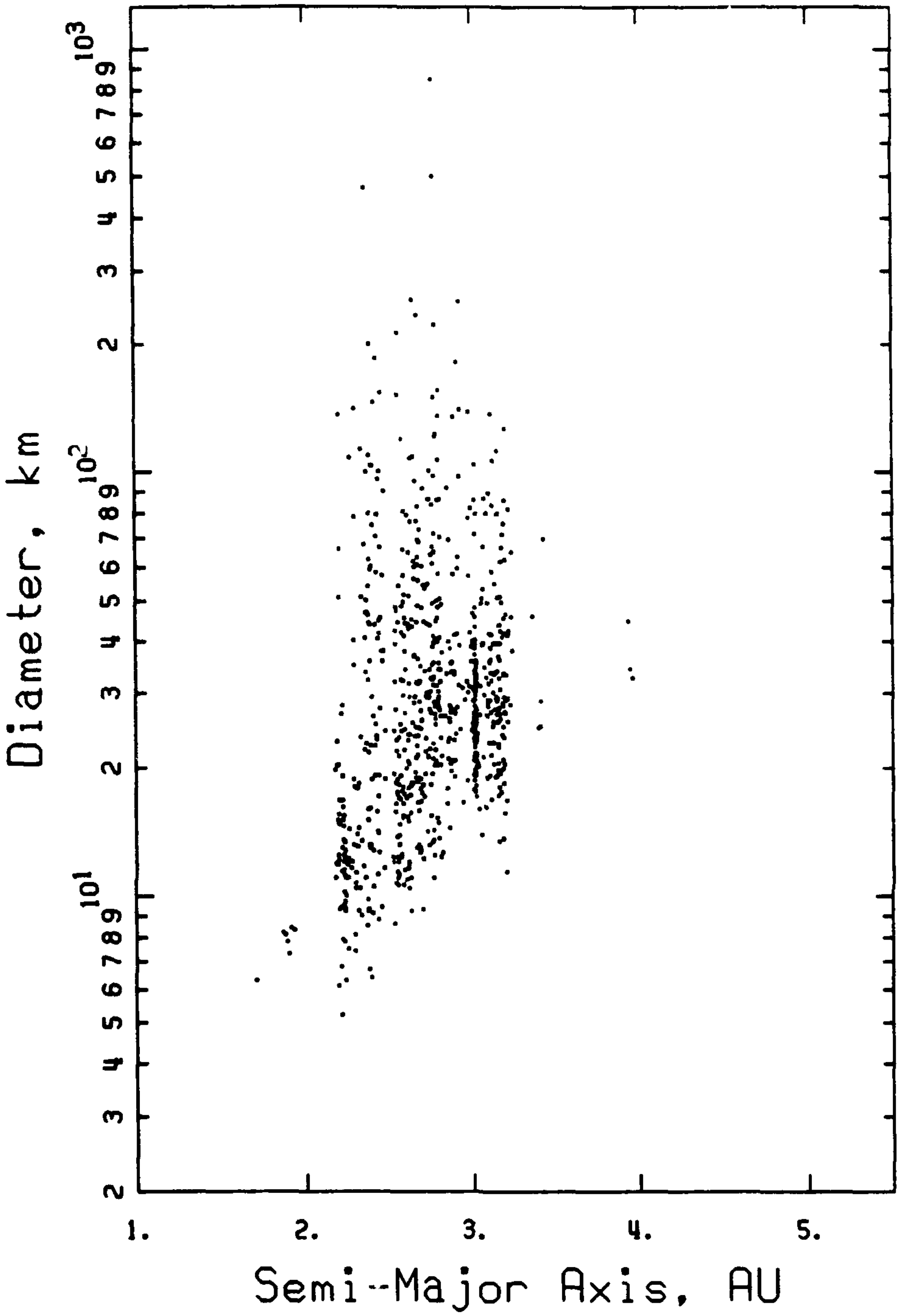


Figure 31b. Log_{10} of the average model diameter in km vs. semimajor axis in AU for each final accepted asteroid (including singletons). Data for IMPS asteroids with a model geometric visual albedo of greater than 0.1 are plotted. Asteroids in the prominent Eos family at 3 AU tend to be small; but IRAS did not detect any moderate albedo Trojans (*cf.*, Fig. 31a).

7. 4 Albedo Dependence on Size

Asteroid diameters and albedos are the most important physical characteristics derived by IMPS. These are obtained in a consistent and uniform manner via the "standard" thermal model (as used by ADAS and described by Lebofsky *et al.*, 1986a,b) which takes into account all relevant details of the observing geometry. It does provide good agreement with the results of stellar occultations by a few large asteroids except possibly for 1 Ceres. However, this simple model does not include unknown factors such as the direction and rate of rotation of each asteroid. In addition, due to a lack of simultaneous visual data, IMPS utilizes an input absolute visual H magnitude for each asteroid which means that the derived diameter and albedo are not independent.

Figure 32a shows a graphical summary of IMPS asteroid results from the IMPS Albedos and Diameters Catalog (final product number 102). Here the $\log_{10}$ of the average model diameter in km is plotted against the $\log_{10}$ of the average model geometric visual albedo for each of 1,884 final accepted IMPS asteroids with at least two good accepted observations (possibly at several wavelengths within a single sighting). No 100 μm data are used in IMPS final averages and data for singleton asteroids with only one accepted observation (usually at 25 μm) in a single sighting are plotted separately in Fig. 32b (*cf.*, IMPS Singleton Catalog, final product number 103). Only a few asteroids with low derived visual albedos (less than ~0.02) survive the IMPS acceptance criteria compared with the previous *IRAS Asteroid and Comet Survey, 1986* (*cf.*, Veeder, 1986 and Veeder *et al.*, 1989b). These may be due to residual noise hits. In addition the small asteroids with very large derived visual albedos (more than ~0.5) may suffer from poor input visual H magnitudes. These extreme cases may also be due to large light curves and deserve special consideration.

Note that there is a residual aliasing towards ridges with a slope of minus one half which is evident in the log-log plot (Fig. 32a) due to the fact that many of the input absolute magnitudes are from rounded photographic estimates (*cf.*, Fig. 27, Veeder 1986 and Veeder *et al.*, 1989b). This effect is not large enough to hide the observed bimodal albedo distribution for large asteroids. The singleton asteroids plotted in Fig. 32b are expected to be somewhat unreliable. Additional caveats are discussed in §6.5.

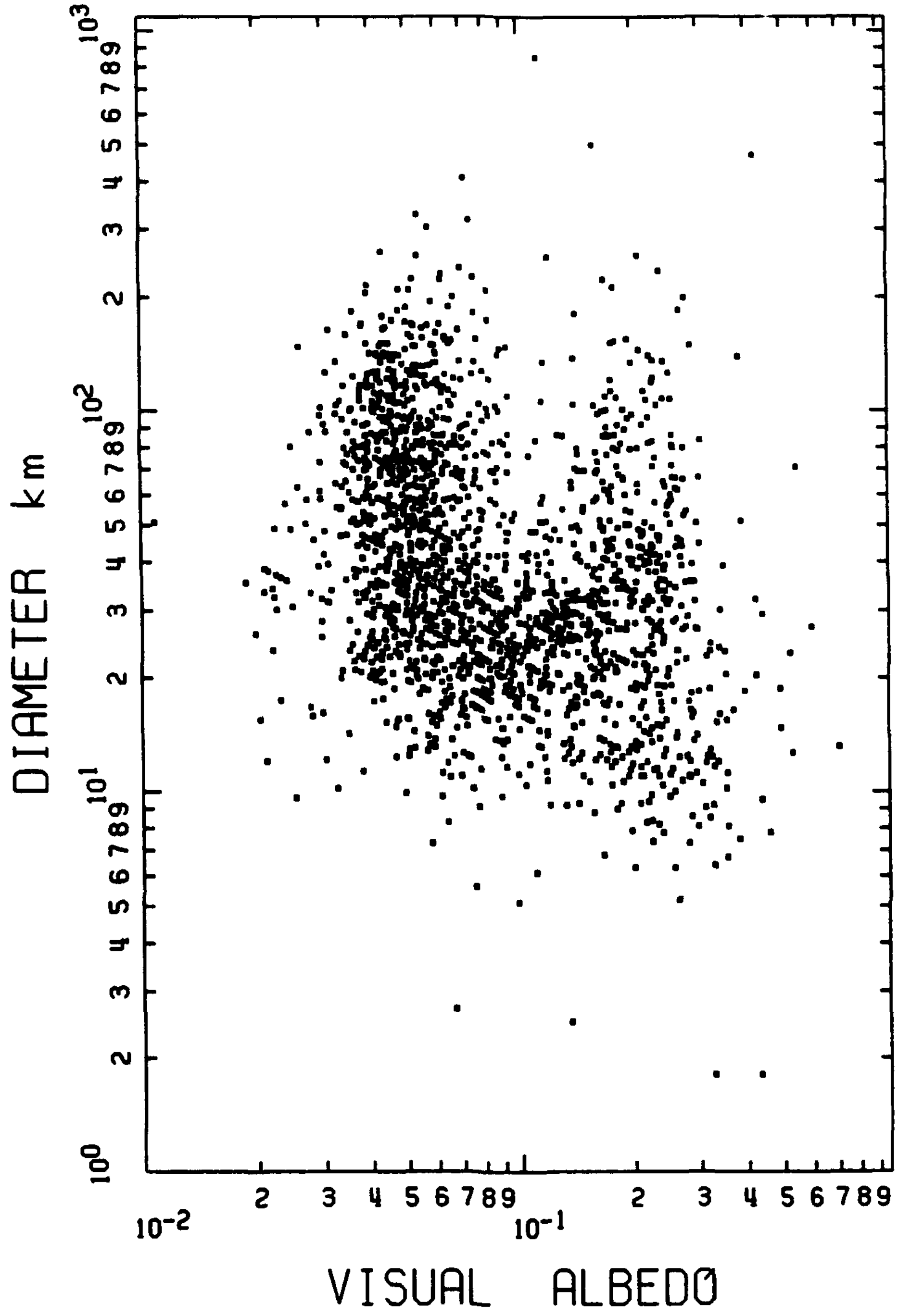


Figure 32a. Log_{10} of the average model diameter in km vs. $\log_{10}$ of the average model geometric visual albedo for final accepted IMPS asteroids. Data for each of 1,884 IMPS asteroids with at least two good accepted observations (possibly at several wavelengths within a single sighting) are plotted. Most of the asteroids with average albedos less than 0.02 do not survive this restrictive criteria. Many small asteroids near an albedo of 0.1 appear to be reliable (*cf.*, Fig. 32b).

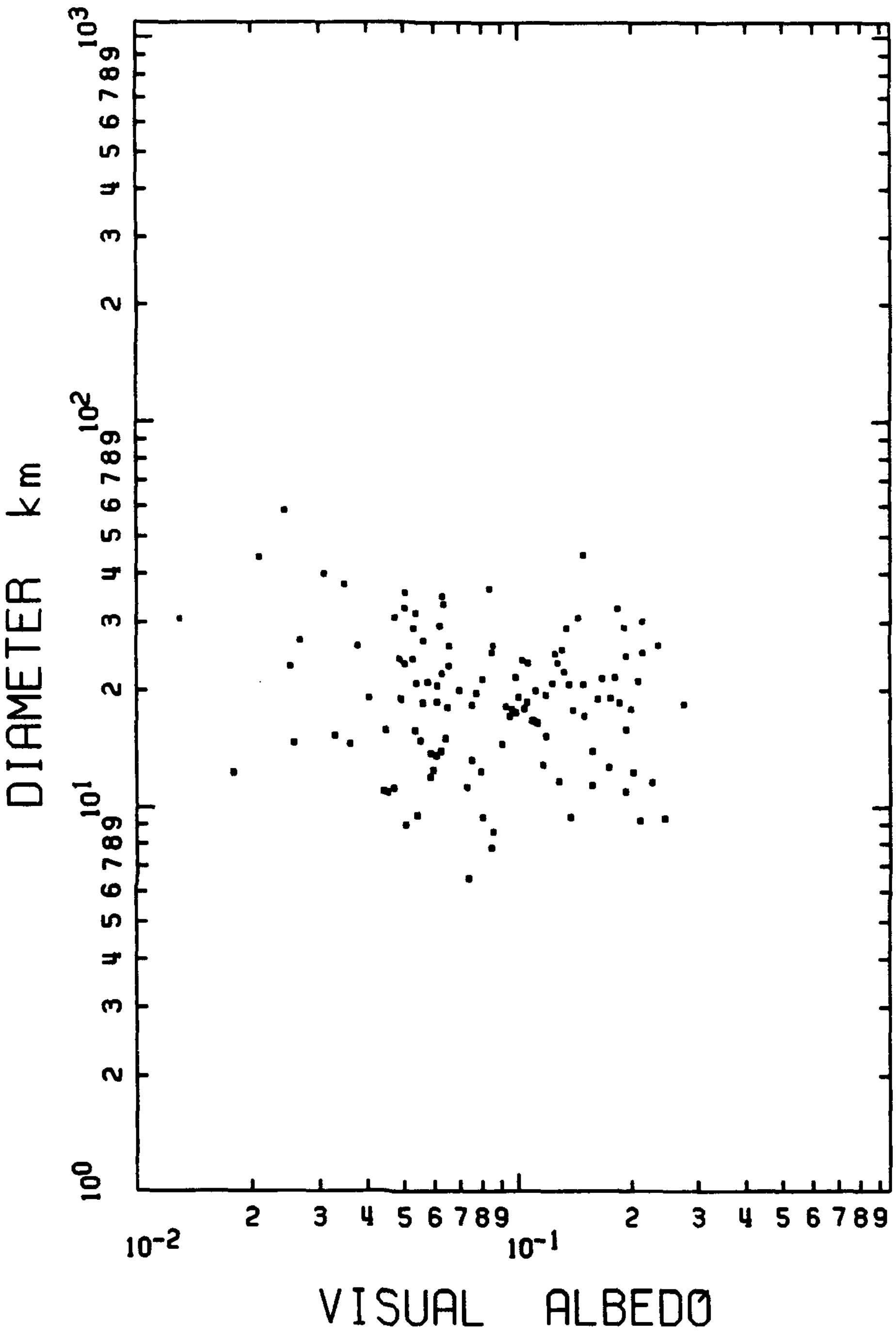


Figure 32b. $\log_{10}$ of the average model diameter in km vs. $\log_{10}$ of the average model geometric visual albedo for each of 120 final accepted IMPS singleton asteroids with only one accepted observation (at one wavelength within a single sighting). Many of the asteroid associations with an albedo of less than 0.02 are faint singletons with low SNR (IRAS estimated at 25 μm) (*cf.*, Fig. 32a).

Asteroids with diameters larger than approximately 40 km show the well known bimodal distribution between low and moderate albedos. This is also apparent in Fig. 33a which is a histogram for final accepted IMPS asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting and with an average model diameter greater than 40 km) as a function of the $\log_{10}$ of the average model geometric visual albedo. Note that these are binned on a log scale. The peaks in the albedo distribution for large asteroids occur near 0.05 and 0.2 for the derived visual albedo. Large asteroids with albedos near or slightly above 0.1 are apparently quite rare. IMPS may be somewhat biased against very high albedos. The ratio of dark to moderate albedo IMPS asteroids is significantly larger than similar ratios of C to S class or neutral to red (visual color) asteroids. That is, there are about three times as many large IMPS with albedos less than 0.1 as there are with higher albedos. This compares with a ratio of 2:1 for the taxonomic sample discussed by Tedesco *et al.*, (1989b). This reveals a subtle selection effect within available visual photometry in addition to the more obvious discrimination against targets with faint *apparent magnitudes*. This also illustrates the need to update the bias correction for the population of D class asteroids (*cf.*, Gradie and Tedesco, 1982, Gradie *et al.*, 1989, and Tedesco *et al.*, 1989a).

In contrast, asteroids smaller than approximately 40 km with a derived albedo near 0.1 are apparently quite common. Figures 32a and 32b show no obvious structure within the albedo distribution of small asteroids. This seems to occur before IMPS becomes very incomplete at still smaller diameters. (Even in the inner belt, below a diameter of 10 km IMPS is obviously incomplete due to the inherited bias from available orbital elements.) As shown in Fig. 32b, many of the accepted singletons have small diameters because they tend to be among the associations with low flux density (near the IRAS survey SNR cutoff). However, Fig. 32a shows that many small asteroids do have multiple observations and indeed these tend to have good SNR (due to an adequate flux density). These small asteroids with multiple accepted observations meet all IMPS criteria for reliability. The smooth distribution of derived visual albedos for small asteroids is shown in Fig. 33b which is a histogram for final accepted IMPS asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting and with an average model diameter less than 40 km) as a function of the $\log_{10}$ of the average model geometric visual albedo. Note that these data are binned on a log scale. Veeder (1991) discusses the possibility that this apparent distribution may result from the lack of a mature dusty regolith on many small asteroids. This would negate an important assumption of the "standard" thermal model and result in an anomalously high IMPS derived visual albedo for some small asteroids. Veeder *et al.*, (1989a) discuss this problem with respect to near-Earth Apollo and Amor asteroids.

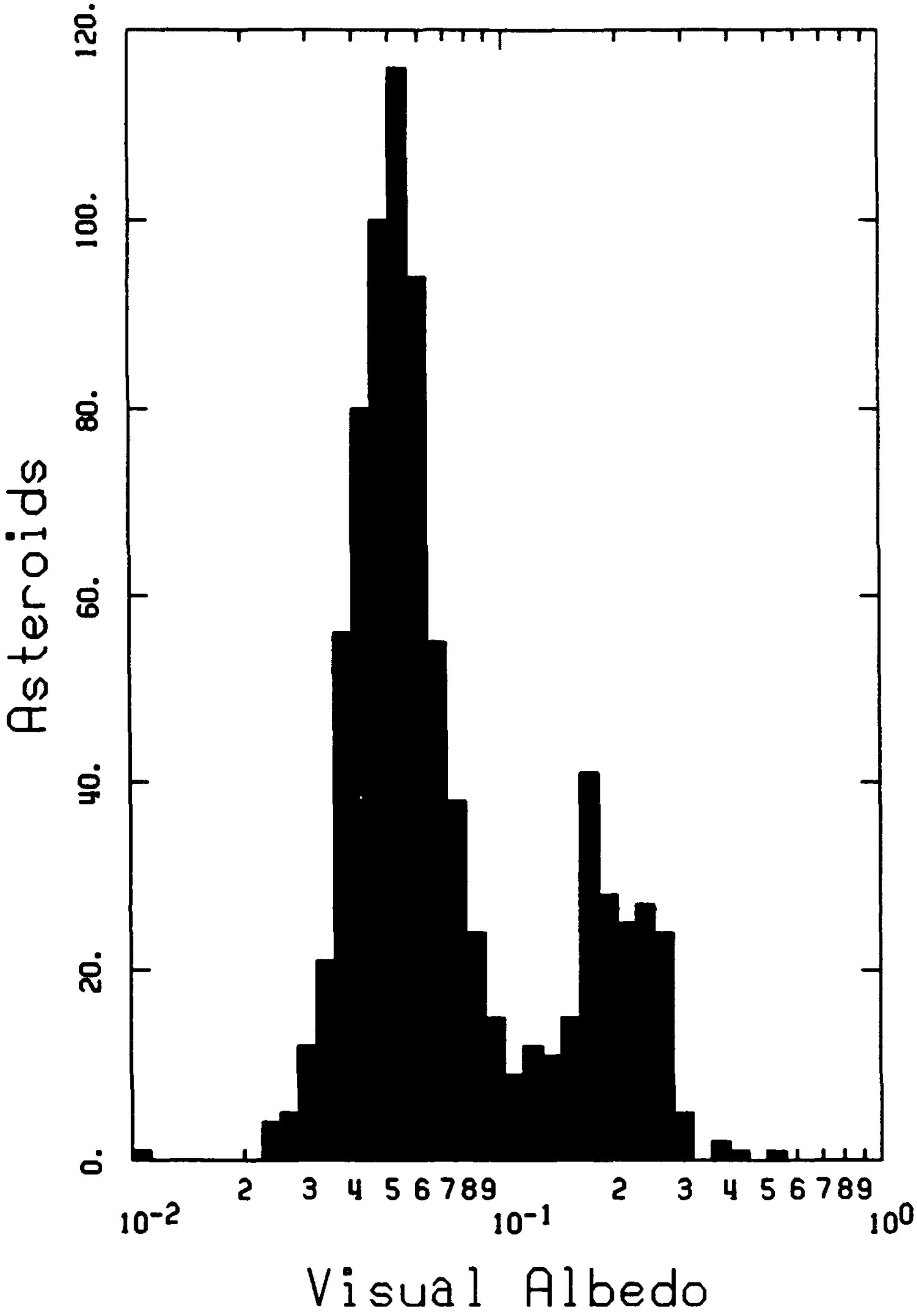


Figure 33a. Histogram for 822 final accepted IMPS asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting) and with an average model diameter greater than 40 km as a function of the $\log_{10}$ of average model geometric visual albedo. The albedo frequency distribution is peaked near a value of 0.05 with a secondary peak near a value of 0.2 for large asteroids (*cf.*, Fig. 33b).

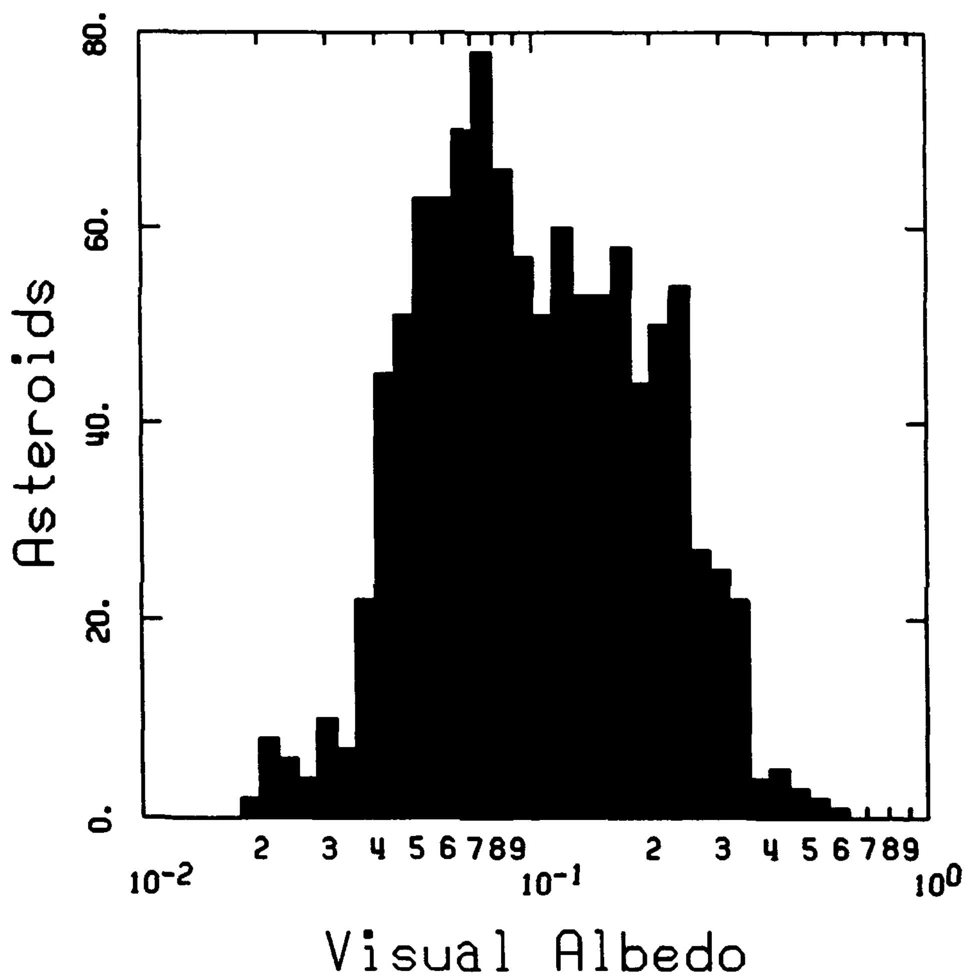


Figure 33b. Histogram for 1,064 final accepted IMPS asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting) and with an average model diameter less than 40 km as a function of the $\log_{10}$ of average model geometric visual albedo. Small asteroids apparently have a smooth albedo frequency distribution (*cf.*, Fig. 33a).

Figures 34a, 34b, and 34c show histograms of the distributions of derived average diameters for low, medium and high albedo groupings of accepted asteroids. Note that these data are binned on log scales. These frequency distributions increase with decreasing diameters as expected until they roll over due to the incompleteness of input orbital elements and the IRAS cutoff SNR. Some of the smallest IMPS asteroids are near-Earth Apollos and Amors. Again, as can be seen in Fig. 32a, those few asteroids with albedos near or slightly above 0.1 tend to be small. That is, within this infrared SNR limited sample, moderate albedo asteroids have a lower mean size in general than dark asteroids. Dark albedos dominate especially among the large asteroids.

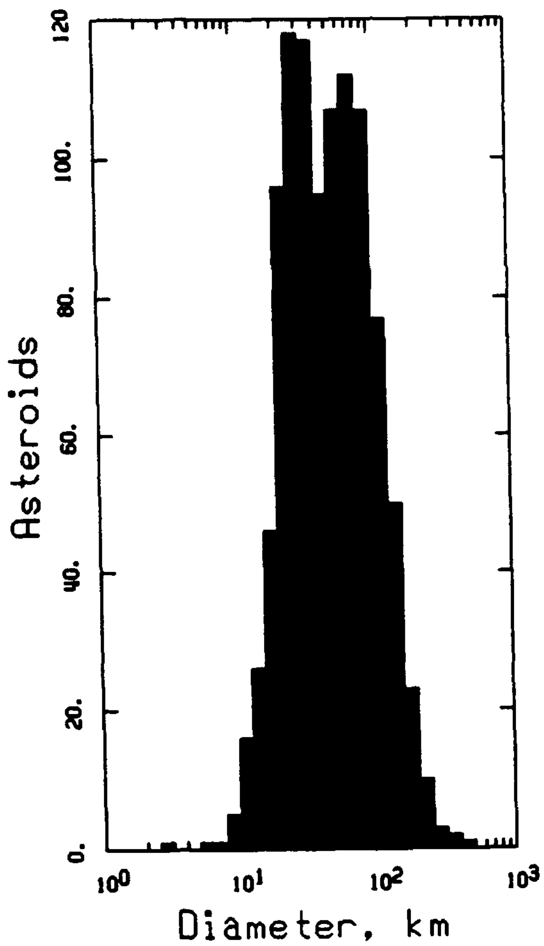


Figure 34a. Histogram for 1,014 final accepted asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting) as a function of the $\log_{10}$ average model diameter in km. Data for IMPS asteroids with a model geometric visual albedo less than 0.08 are plotted (*cf.*, Figs. 34b and 34c).

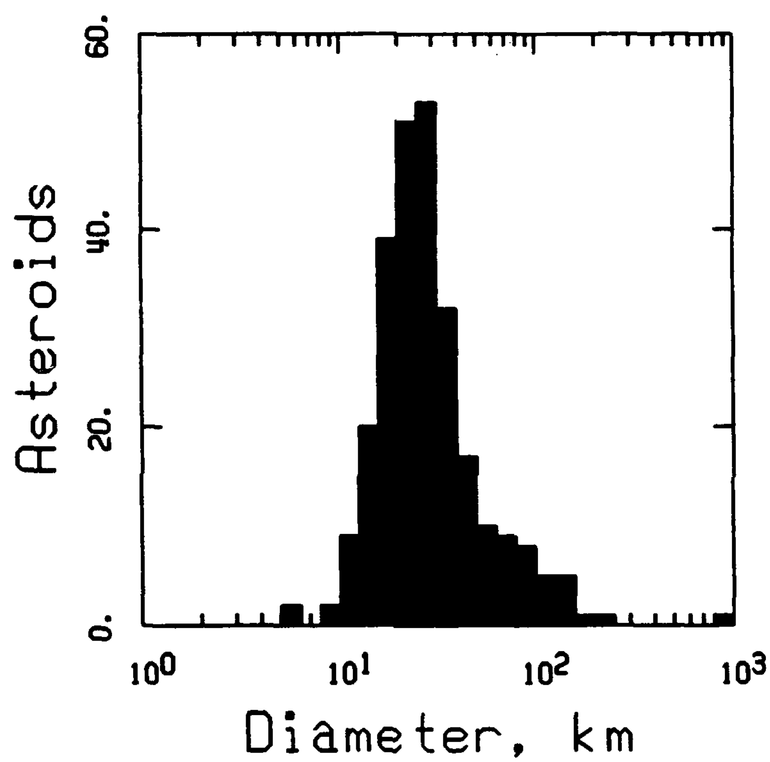


Figure 34b. Histogram for 265 final accepted IMPS asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting) as a function of the $\log_{10}$ average model diameter in km. Data for IMPS asteroids with a model geometric visual albedo less than 0.12 and greater than a 0.08 are plotted. These apparently tend to have small diameters (*cf.*, Figs. 34a and 34c).

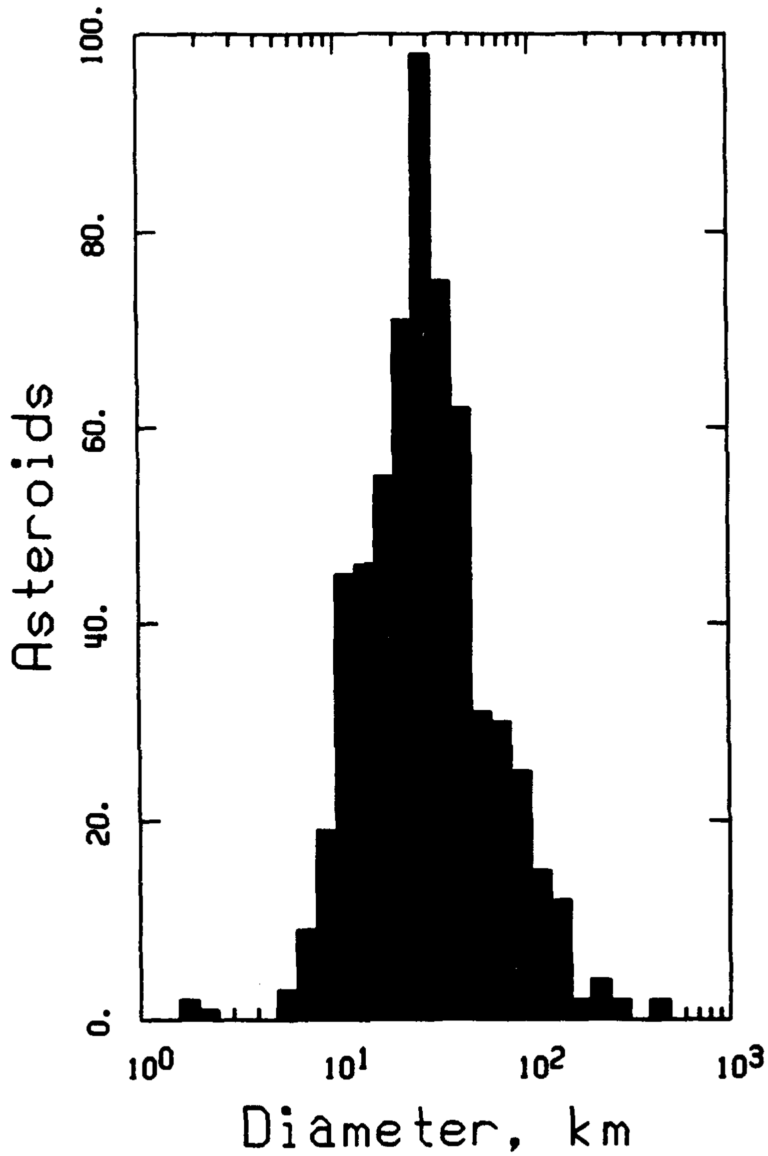


Figure 34c. Histogram for 609 final accepted asteroids with data used from multiple observations (possibly at several wavelengths within a single sighting) as a function of the $\log_{10}$ average model diameter in km. Data for IMPS asteroids with a model geometric visual albedo greater than 0.12 are plotted (*cf.*, Figs. 34a and 34b).

Chapter 8

SUMMARY

Edward F. Tedesco, John W. Fowler, and Thomas J. Chester

This chapter discusses the completeness and reliability of the IRAS Minor Planet Survey, summarizes the statistical adjustments made to the derived results, and discusses the implications of the observed asteroid albedo size-dependence.

8.1 Completeness

The question of geometrical completeness of the IRAS coverage of asteroids is a complicated one, since the IRAS survey was not conducted in a manner at all similar to a beam sweeping uniformly over the sky. Because the survey was primarily concerned with inertially fixed sources, different parts of the sky were covered at different times, with the result that coverage was highly fragmented for any class of orbital elements (*e.g.*, *objects with the same elements except for the longitude of the* ascending node). Here we use the expression "geometrical coverage" to mean that a given asteroid was swept by the IRAS field of view; a detection may or may not have occurred.

There are at least three geometrical factors that make the completeness of the IRAS survey different for the asteroids than for the inertially-fixed sources. The first two factors are independent of asteroid motion:

A. The observed brightness of an asteroid depends on the IRAS viewing geometry.

In particular, although IRAS made most of its observations at a solar elongation angle of 90°, that angle could vary from 60° to 120° and could be very different for scans close together in time or close together in ecliptic longitude. As the elongation angle varied, both the distance and phase angle (and hence the observed brightness) of an asteroid at a given ecliptic longitude varied. Therefore, the asteroid brightness distribution for a given ecliptic longitude was a function of the solar elongation angle(s) at which the observation scans were obtained.

The maximum variation occurred for the closest asteroids. For a ring of asteroids at 2 AU from the sun, the geometrical distance effect causes a maximum variation in the flux of a factor of 3.1. The phase angle variation is too small to significantly affect the infrared flux. (The minimum phase angle is 25.7° at 60° or 120° elongation, while the maximum phase angle is 30° at 90° elongation).

In addition, the essentially Earth-centered IRAS viewing geometry caused an apparent variation in the density of asteroids with ecliptic longitude. The maximum observed density enhancement, caused by a variation of solar elongation scan angle from 60° to 120°, is a factor of 1.8.

B. The rate of coverage of the asteroid belt is significantly lower than the coverage of the inertial sky due to the Earth-centered observation frame.

Although IRAS covered the inertially-fixed sky completely after six months, a gap remained in the asteroid coverage due to the motion of the Earth (see Fig. 35). Specifically, IRAS began the survey at ecliptic longitudes of approximately 60° and 240°. Six months later, IRAS finished the first survey of the sky at those same longitudes. However, since the Earth was on the opposite side of the Sun from its original position, the part of the asteroid belt currently at ecliptic longitudes from approximately 62° to 108° (for asteroids at 2 AU from the sun) remained unsurveyed. (Of course, since these scans went somewhere, this implies that other parts of the asteroid belt had a higher density of scans than the inertially-fixed sky.)

The third hours-confirming survey of the sky began by backing up to almost the maximum scan angle and resurveying the area of the sky just previously surveyed. When 60° longitude was reached again, those asteroids were being seen for the first time, even though inertial sources were being resurveyed. Thus, ecliptic longitudes from ~62° to ~108° contain two, independent, surveys of different asteroids.

C. Asteroidal motion

Asteroidal motion causes several different effects. The major effect for asteroids with prograde orbits is to slightly lower the rate of coverage for those objects. For example, as mentioned above, without asteroid motion, for asteroids at 2 AU from the sun, ecliptic longitudes from ~62° to108° were unsurveyed at the end of the first survey of the sky. Asteroidal motion amounts to about 20 degrees during the time it takes IRAS to observe that area, and hence IRAS must observe until longitude 130° to entirely survey those asteroids.

In fact, ignoring the two major five degree gaps of the inertial coverage, IRAS was able to completely survey the asteroid belt except for prograde-orbiting asteroids having circular orbits with radii less than about 2.7 AU. Asteroids in such orbits moved too fast for IRAS to completely catch up to them.

A second effect due to asteroidal motion is caused by the short-term variations in the IRAS coverage. The IRAS survey used only about 60% of the IRAS observation time, with most of the rest of the time devoted to pointed observations. In addition, the survey was suspended due to the presence of the moon in a particular hemisphere for

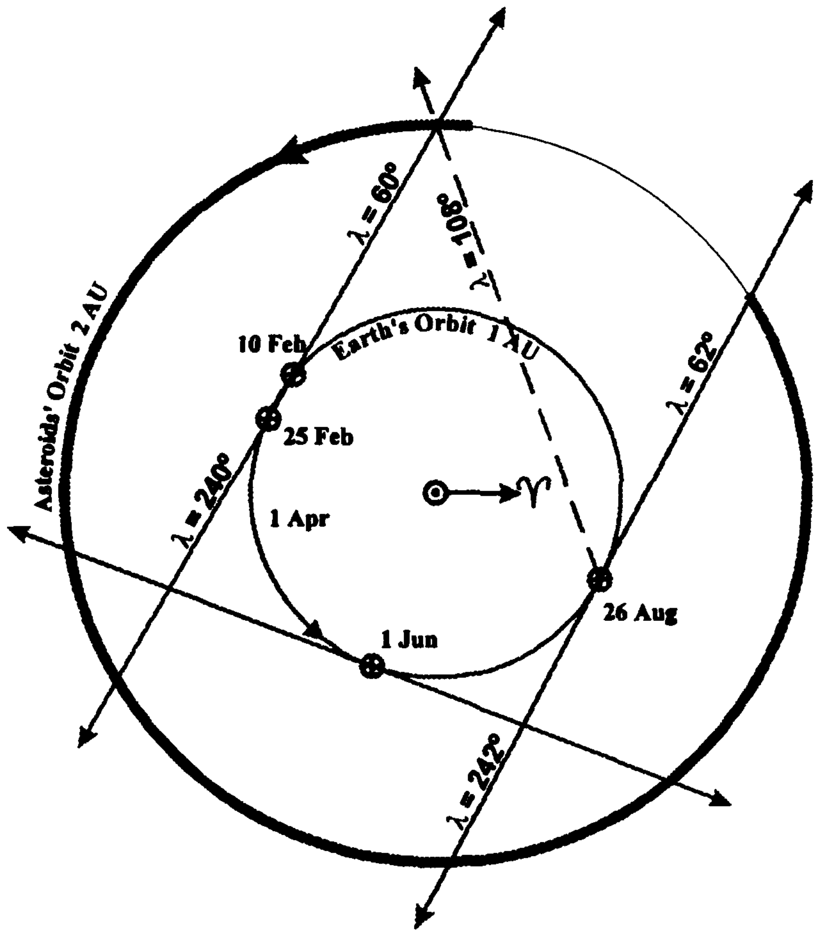


Figure 35. Geometrical coverage of a ring at 2 AU by the first six months of the IRAS mission. IRAS began the survey at ecliptic longitudes of ~60° and 240°. Approximately six months later, IRAS finished the first survey of the sky at about those same longitudes. However, since the Earth was then on the opposite side of the Sun from its position at the start of the mission, the part of the asteroid belt now at ecliptic longitudes from approximately 62° to 108° remained unsurveyed.

about 3 days per month. Because the IRAS survey was designed to ensure complete coverage of the inertial sky, these effects were compensated in carrying out the survey. However, because of earth motion and asteroidal motion during those short-term hiatuses, there are significant local variations in coverage of the asteroids.

For example, asteroids can "dance between" IRAS scans, and never be observed by IRAS. More often, asteroids pick up extra individual coverage when they are observed once before an hiatus, and observed again after the hiatus when they have moved into inertially-unsurveyed sky.

In order to obtain some feeling for the latter two effects, we ran a simulation using the actual survey observations and a set of hypothetical tracer asteroids. These tracer asteroids had circular orbits with zero inclinations. Ten evenly-spaced rings with semimajor axes from 2.0 to 5.5 AU were populated with a total of 3,000 asteroids. These "asteroids" were assigned longitudes of the ascending node such that the linear density along the rings was constant. For each IRAS scan, all asteroids within 15 arcminutes of the IRAS boresight were counted as observed and the number of coverages was computed for each asteroid.

The results at the end of each 50-SOP period are shown in Fig. 36, where the tracers are viewed from above the ecliptic. Since the survey began at SOP 29, only 22 SOPs are displayed in the first panel; after that, each period covers a full 50 SOPs except for the last which covers 48 because asteroid extraction was inadvertently turned off for SOPs 599 and 600. The depth of coverage is shown by plotting each tracer with a plus sign whose size increases with the number of coverages. Each tracer is shown at the longitude where it was located on the last SOP of the period indicated, thus the coverage pattern rotates most rapidly in the 2 AU ring.

The mini-survey occurred from SOPs 29-43 and creates the over-dense areas in the first panel. The two five degree gaps fully show up by SOP 300. Note the repeated coverage at lower left between SOPs 350 and 400 when the survey in one hemisphere begins coverage of the asteroids previously seen by the survey begun in the other hemisphere. The third hours-confirming survey began at SOP 425, creating the over-dense areas seen after SOPs 450 and 500, with new coverage finally seen beginning after SOP 500. In the final panel, one can see the unsurveyed parts of the inner two rings. For this class of orbital elements, more than 94% of the tracers were observed at least once. The inner ring is the least complete because the higher rate of motion allows tracers which lagged the coverage early to avoid being "lapped". The completeness varied over semimajor axis as shown in Table 5.

Note that, except for the innermost orbits where the asteroidal motion prevented a full survey, the completeness for this set of asteroids is actually higher than that of the inertial survey! This is a direct result of the "slower" asteroidal-survey — the five degree gaps in the inertial sky are not quite as big for the asteroids (see §8.1.B above). However, note that retrograding asteroids can (and a few near-Earth asteroids actually did) easily skip between IRAS scans, and hence the values given in Table 5 apply only to asteroids with elements similar to those assumed in this simulation.

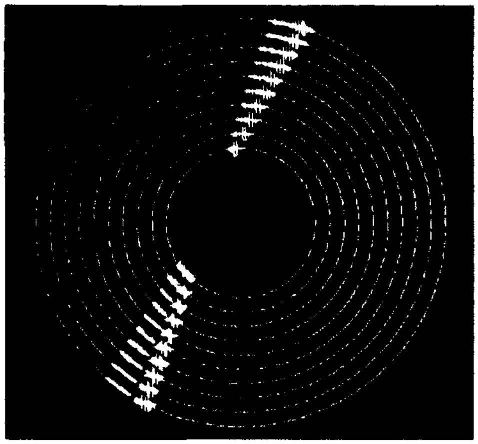
Table 5. Completeness Versus Semimajor Axis Ring for the Simulated Asteroids

Semimajor Axis (AU)	Completeness
2.0 – 3.0	0.944
3.0 – 4.0	0.988
4.0 – 5.0	0.983
5.0 – 5.5	0.979
Infinity	0.973

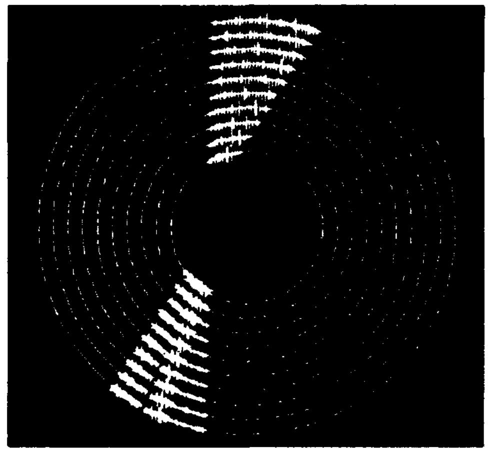
Finally, Table 6 shows detailed results of the number of times a simulated asteroid was seen. Note that the mean coverage must always be the same within each ring. The "slower" coverage of the asteroids causes there to be many more asteroids observed a large number of times than for inertial sources.

Table 6. Number of Times Simulated Asteroids Were Observed (2,000 in each ring)

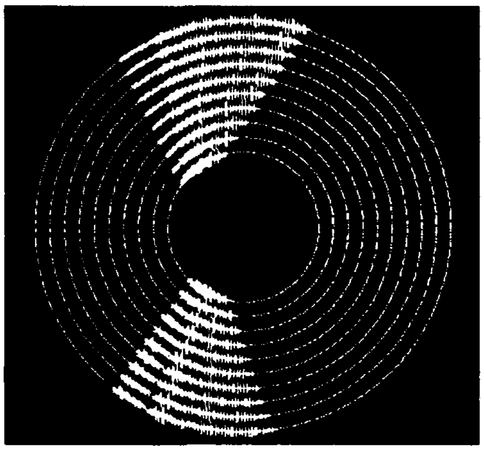
Semimajor axis range	0	1	2	3	4	5	6	7	8	9	10	>10	mean	sigma
2.0-3.0	112	7	237	183	201	223	221	248	176	134	95	163	5.82	3.33
3.0-4.0	24	7	246	106	304	266	304	286	173	107	68	109	5.82	2.86
4.0-5.0	34	7	214	56	377	220	360	325	175	75	60	97	5.82	2.78
5.0-5.5	43	10	182	36	344	251	434	320	165	76	55	85	5.82	2.70
Infinity	55	3	2	2	441	174	726	384	122	35	16	40	5.82	1.99



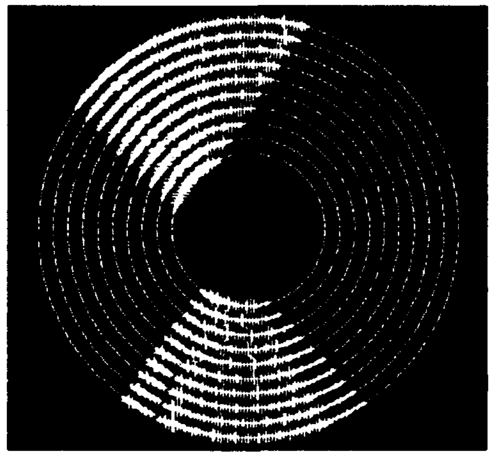
Coverage after 50 SOPs.



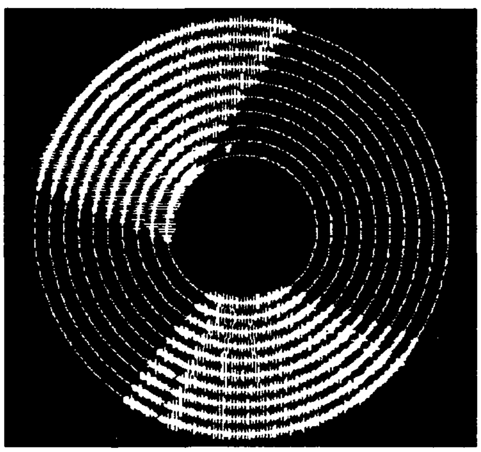
Coverage after 100 SOPs.



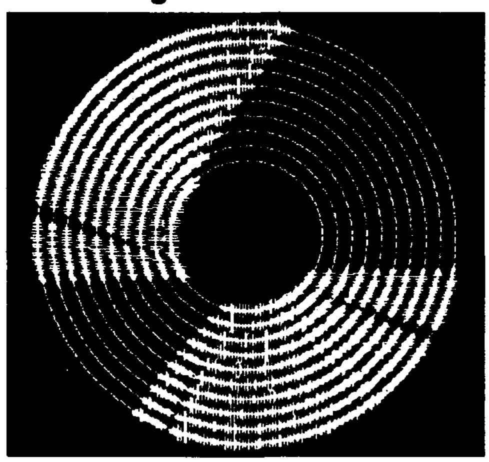
Coverage after 150 SOPs.



Coverage after 200 SOPs.

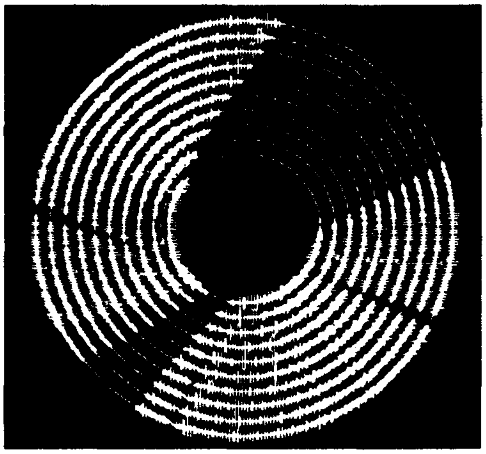


Coverage after 250 SOPs.

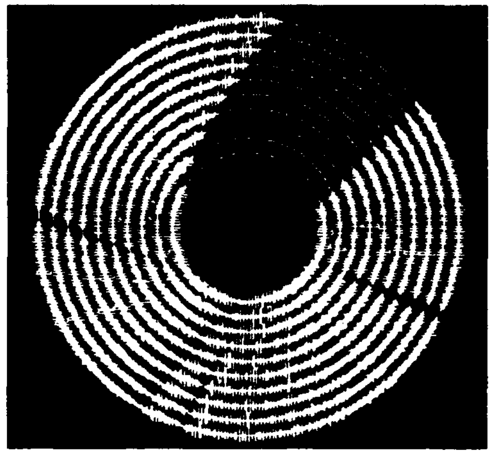


Coverage after 300 SOPs.

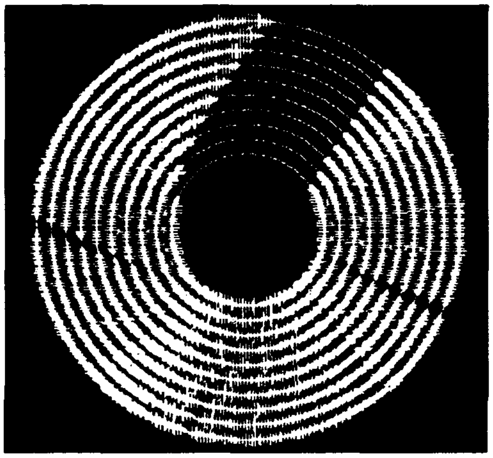
Figure 36. Coverage of hypothetical tracer asteroids at the end of every 50 SOPs. The tracers are viewed from above the ecliptic. The depth of coverage is shown by plotting each tracer with a plus sign whose size increases with the number of coverages. Each tracer is shown at the longitude where it was located on the last SOP of the period indicated, thus the coverage pattern rotates most rapidly in the 2 AU ring. The minisurvey occurred from SOPs 29-43 and creates the over dense areas in the first panel. The two five degree gaps fully show up after SOP 300. Note the repeated



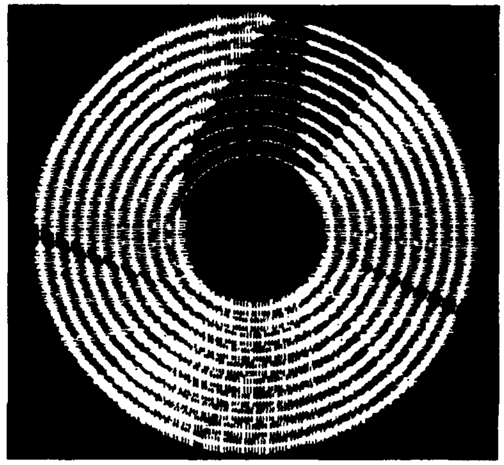
Coverage after 350 SOPs.



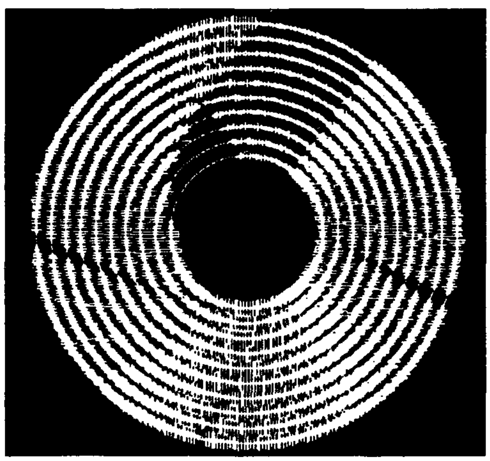
Coverage after 400 SOPs.



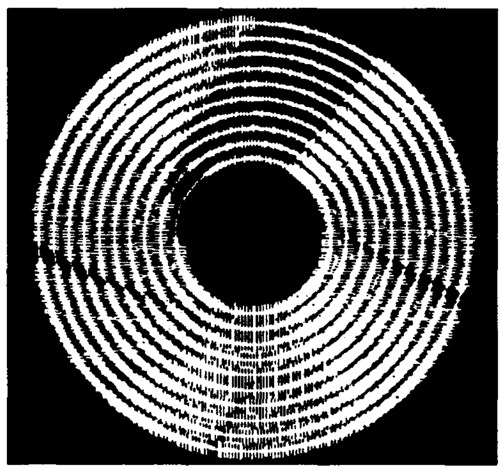
Coverage after 450 SOPs.



Coverage after 500 SOPs.



Coverage after 550 SOPs.



Coverage after 600 SOPs.

coverage at lower left between SOPs 350 and 400 when the survey in one hemisphere begins coverage of the asteroids previously seen by the survey begun in the other hemisphere. The third hours-confirming survey began at SOP 425, creating the over dense areas seen after SOPs 450 and 500, with new coverage finally seen beginning after SOP 500. In the final panel, one can see the unsurveyed parts of the inner two rings.

8.2 Reliability

After the final run of the association processor had been made, the check described here was performed to further assess the reliability of sources accepted as asteroids. (See §6.4 for further discussion regarding reliability of the accepted sightings.)

There were 38,281 predicted asteroid crossings of the IRAS focal plane while it was in survey mode. Of these predicted sightings, 1,123 (a total of 232 different asteroids) had predicted 25 μm flux densities that never exceeded 0.140 Jy (the 1σ limit)[1]. Table 8 lists these 232 asteroids with their maximum predicted 25 μm flux densities during 1983, *i.e.*, the time during which IRAS was conducting its survey.

Table 7 summarizes the results of this exercise: 155 of the 1,123 potential sightings, for 31 of the 232 different asteroids, generated an association, *i.e.*, a source with a 25 μm flux density having an SNR > 3 was found within the association ellipse for the putative asteroid. This implies that the false association rate is about 14%. Note that all 155 of these false sightings were rejected by the IMPS data processing system; none were used in producing an accepted IMPS albedo and diameter thus validating the reliability of our acceptance criteria. Furthermore, there is no significant difference in the false association rate between the ID Type 1 and the ID Type 2 asteroids. This is to be expected since these 232 asteroids are essentially a set of random positions near the ecliptic.

Table 7. Summary of < 1σ Flux Limit Association Test

ID Type	Number of Predicted Sightings	Number of Predicted Asteroids	Number (%) of Predictions Associated	Number (%) of Asteroids Associated
1	140	26	24 (17%)	6 (23%)
2	983	206	131 (13%)	25 (11%)
Totals:	1,123	232	155 (14%)	31 (13%)

[1]The 45 asteroids mentioned in §6.4.4 were a subset of these 232.

Table 8. Asteroids Scanned by IRAS with Predicted 25 μm Flux Density Always < 0.140 Jy.

Obj. Type	No.	Predicted Flux Density	Obj. Type	No.	Predicted Flux Density	Obj. Type	No.	Predicted Flux Density
1	944	0.091	2	585	0.042	2	736	0.035
1	1221	0.042	2	601	0.099	2	738	0.079
1	1862	0.132	2	607	0.117	2	741	0.068
1	1863	0.052	2	610	0.137	2	751	0.095
1	1915	0.001	2	612	0.088	2	753	0.053
1	1921	0.080	2	613	0.118	2	754	0.105
1	2059	0.041	2	616	0.065	2	758	0.131
1	2061	0.027	2	619	0.139	2	770	0.118
1	2099	0.126	2	620	0.088	2	771	0.089
1	2101	0.003	2	622	0.116	2	774	0.073
1	2608	0.007	2	624	0.026	2	780	0.127
1	3102	0.026	2	625	0.096	2	781	0.096
1	3271	0.027	2	626	0.027	2	782	0.135
1	3360	0.013	2	628	0.121	2	787	0.119
1	3671	0.031	2	629	0.130	2	791	0.057
1	3688	0.032	2	630	0.123	2	793	0.115
1	3757	0.023	2	633	0.129	2	805	0.031
1	3833	0.084	2	634	0.080	2	807	0.068
1	4255	0.120	2	635	0.087	2	808	0.122
1	4341	0.081	2	639	0.118	2	811	0.071
1	4394	0.124	2	645	0.136	2	813	0.070
1	4401	0.029	2	651	0.125	2	818	0.059
1	4486	0.074	2	653	0.080	2	819	0.085
1	4503	0.020	2	656	0.079	2	821	0.040
1	4587	0.038	2	657	0.086	2	826	0.066
1	4596	0.036	2	662	0.103	2	828	0.041
2	46	0.127	2	667	0.070	2	829	0.091
2	118	0.004	2	671	0.055	2	836	0.085
2	296	0.036	2	674	0.083	2	837	0.115
2	379	0.087	2	677	0.134	2	839	0.033
2	383	0.103	2	686	0.056	2	841	0.088
2	387	0.056	2	690	0.115	2	845	0.108
2	391	0.123	2	697	0.097	2	850	0.119
2	417	0.096	2	707	0.104	2	852	0.025
2	425	0.054	2	708	0.066	2	855	0.025
2	444	0.031	2	711	0.039	2	857	0.095
2	480	0.010	2	713	0.132	2	860	0.097
2	519	0.030	2	715	0.132	2	865	0.086
2	542	0.024	2	721	0.086	2	866	0.127
2	550	0.116	2	724	0.111	2	868	0.097
2	561	0.086	2	728	0.115	2	922	0.088
2	571	0.092	2	730	0.107	2	1101	0.120

Table 8. Asteroids Scanned by IRAS with Predicted 25 µm Flux Density Always < 0.140 Jy. (Continued)

Obj. Type	No.	Predicted Flux Density	Obj. Type	No.	Predicted Flux Density	Obj. Type	No.	Predicted Flux Density
2	1154	0.097	2	1851	0.034	2	2276	0.071
2	1162	0.137	2	1886	0.031	2	2278	0.089
2	1239	0.131	2	1898	0.033	2	2282	0.126
2	1242	0.101	2	1899	0.060	2	2283	0.077
2	1250	0.110	2	1909	0.017	2	2327	0.120
2	1298	0.002	2	1912	0.129	2	2331	0.029
2	1316	0.016	2	1920	0.013	2	2334	0.138
2	1332	0.001	2	1924	0.035	2	2335	0.123
2	1336	0.057	2	1944	0.013	2	2352	0.096
2	1371	0.007	2	1966	0.001	2	2354	0.138
2	1472	0.025	2	1968	0.122	2	2369	0.106
2	1477	0.009	2	1979	0.137	2	2370	0.087
2	1479	0.003	2	1993	0.002	2	2375	0.094
2	1483	0.120	2	1994	0.105	2	2397	0.060
2	1512	0.031	2	2096	0.008	2	2398	0.120
2	1522	0.005	2	2116	0.036	2	2403	0.074
2	1667	0.020	2	2120	0.027	2	2407	0.114
2	1678	0.026	2	2122	0.004	2	2412	0.101
2	1692	0.013	2	2159	0.028	2	2414	0.037
2	1712	0.078	2	2162	0.118	2	2421	0.113
2	1713	0.070	2	2165	0.015	2	2425	0.092
2	1718	0.094	2	2186	0.053	2	2436	0.132
2	1722	0.110	2	2195	0.008	2	2461	0.057
2	1725	0.026	2	2201	0.000	2	2467	0.124
2	1726	0.075	2	2202	0.004	2	2475	0.119
2	1728	0.058	2	2204	0.032	2	2496	0.120
2	1729	0.078	2	2215	0.018	2	2503	0.080
2	1733	0.027	2	2217	0.063	2	2510	0.051
2	1739	0.070	2	2238	0.129	2	2512	0.120
2	1740	0.121	2	2244	0.088	2	2533	0.127
2	1744	0.001	2	2247	0.083	2	2594	0.102
2	1747	0.091	2	2248	0.074	2	2597	0.108
2	1753	0.116	2	2249	0.136	2	2618	0.123
2	1780	0.077	2	2250	0.048	2	2621	0.128
2	1781	0.055	2	2259	0.135			
2	1805	0.006	2	2274	0.035			

8.3 IMPS Versus ADAS

This section summarizes the major differences between ADAS (documented in *IRAS Asteroid and Comet Survey, 1986*) and the IMPS processing described herein. There was one major difference in the association algorithm and two in the algorithms that computed the final albedos and diameters. These are discussed in detail below. The ground-based data sets used differed as well. ADAS processed asteroids through number 3318 plus 135 asteroids with two-or-more-opposition orbits while for IMPS these numbers were 4679 and 2,632, respectively. ADAS used asteroid absolute magnitudes and slope parameters on the 1985 IAU system (*cf.*, *IRAS Asteroid and Comet Survey, 1986*), while IMPS used the 1991 system (*cf.*, §3.1.3). In addition, there were several minor differences, such as the use in IMPS of three sets of osculating orbital elements for two sets, abandonment of the p_H- G check (*cf.*, *IRAS Asteroid and Comet Survey, 1986,* §6.1.4.5), redefinition or elimination of several status words, and the identification and correction of a few minor program "bugs".

8.3.1 Association Algorithm

The ADAS association algorithm used a one-sigma asteroid positional uncertainty that was a function of the reliability of the orbital elements. In the course of the IMPS processing it was realized that the larger acceptance area used for asteroids with less-reliable orbital elements led to many spurious associations. This is especially true for faint asteroids. Thus, in *IMPS we adopted a single one-sigma asteroid positional* uncertainty. This single value (ten arcseconds) was, in effect, root-sum-squared with the IRAS Convolved Gaussian-Uniform positional uncertainty. The algorithm used was exactly that of the SDAS PSCORE processor. This change virtually eliminated spurious associations for faint asteroids (*cf.*, §8.2).

8.3.2 Flux Overestimation Correction

There is a systematic error associated with the measured flux densities near the noise limit of the detectors which can increase the reported value by as much as a factor of two compared with that of the true value. Weak sources were often detected when positive noise excursions pushed the source signal above the 3σ signal-to-noise-ratio (SNR) cutoff imposed by the IRAS processing. Negative excursions dropped the signal below the SNR cutoff and so were not detected. Thus, the flux densities of weak sources were systematically overestimated. This overestimation of the flux for low-SNR asteroid detections results in an overestimation of their diameters and an underestimation of their albedos.

The following two correction methods have been used to correct this effect for inertial sources. Each of these methods assumes that the source is non-variable and the noise Gaussian.

1) The number of times the source was scanned compared to the number of times it was detected was used to derive a correction factor by which the observed average flux was then multiplied (*cf., IRAS Explanatory Supplement, 1988*). This is called the "n-over-m" correction method.

2) Cohen *et al.* (1987) used the SNRs from the Point Source Catalog to derive a correction factor as a function of SNR.

The *IRAS Explanatory Supplement* (page XI-4) uses the following Gaussian model to derive <n'> = f(n), where n' is the averaged observed SNR and n is the intrinsic SNR of a point source.

$$\langle n' \rangle = \frac{\int_m^\infty y e^{-(y-n)^2} dy}{\int_m^\infty e^{-(y-n)^2} dy} \tag{32}$$

where m is the threshold SNR value, below which observations are not included in the averaging. This can be used to compute the ratio of the expected observed SNR to the intrinsic SNR; the result is

$$\frac{\langle n' \rangle}{n} = 1 + \left(\frac{1}{n}\right) \frac{e^{\frac{-(m-n)^2}{2}}}{\int_{m-n}^\infty e^{-y^2/2} dy} \tag{33}$$

Unfortunately, two errors in mathematical manipulation yielded instead

$$\frac{\langle n' \rangle}{n} = 1 + \left(\frac{1}{m}\right) \frac{e^{\frac{-(m-n)^2}{2}}}{\int_m^\infty e^{-y^2/2} dy} \tag{34}$$

The equation in the paper by Cohen *et al.* (1987); (notation converted to that used herein) has the same erroneous 1/m factor (instead of 1/n), but the lower limit on the integral is correct (m-n rather than m).

If one uses the formally correct Equ. 33 to generate a table of correction factors (<n'>/n) as a function of n (and m = 3), one finds that the lowest possible value of n' is 3.28, *i.e.*, the threshold itself cannot occur, and a zero-flux point source (n = 0) yields an expected mean observed SNR of 3.28. This happens because the mean value of a Gaussian random number above 3 sigma is 3.28. This means that any point source with a mean observed SNR of 3.28 (or less!) should be corrected to zero!!

The problem is that the equation provides <n'> = f(n), whereas what is needed is <n> = f(n'). One cannot freely interchange n' with <n'>, nor n with <n>. In order to construct a table of <n> = f(n'), consider the following example: suppose a mean SNR of 4 has been obtained; what might have produced this result? Some possibilities are that a source with n = 3 was observed with a noise excursion of +1 sigma, n = 2 with +2 sigma, n = 5 with -1 sigma, etc. Since there are more sources with n = 2 than n = 5, the former is more likely. Thus a luminosity distribution must be used to account for the higher probability of fainter sources with positive noise relative to brighter sources with negative noise. This leads to

$$\langle n\rangle = \frac{\int_0^\infty n\, p_n(n)\, p_\nu(n'-n)\, dn}{\int_0^\infty p_n(n)\, p_\nu(n'-n)\, dn} \qquad (35)$$

where the density functions inside the integrals are for the luminosity (in SNR) and the noise, respectively. This equation gives a minimum-variance estimate of the true SNR for a single observation n'; the threshold plays no role except that only events with n'> m will occur (one could also use a maximum-likelihood estimate by selecting the value of n that maximizes the product of the two density functions).

Since luminosity distributions involve more faint sources than bright ones, there is a flux overestimation error from the luminosity distribution alone. In principle, every observation should be corrected for this effect, and then the effect of thresholding should be applied in addition.

Hence, without at least *a priori* knowledge of the luminosity function, the n-over-m method cannot be used to derive flux overestimation corrections.

Besides the above, the following are true of asteroidal sources but not of inertial sources.

1) Asteroids are intrinsically variable.

2) Asteroids move, thus increasing their "variability" through confusion.

3) About one-third of the accepted asteroids have fewer than three sightings; all inertial sources accepted into the PSC were sighted at least three times.

4) Over 95% of the accepted asteroid sightings are within 20° of the ecliptic plane and hence were observed through the emission from the zodiacal cloud; the vast majority of inertial sources are outside this band and therefore were observed against a less noisy background.

The SNR correction method is rendered less certain by points 1, 2, and 3, while point 4 implies that the SNR-based correction factors, as published by Cohen *et al.* (1987), are not applicable to asteroidal sources. For these reasons neither of these methods, even if they were valid, could be applied to asteroidal sources.

Thirty-nine percent of the accepted IRAS 25 μm asteroid sightings, and 47% of the 12 μm and 60 μm sightings, are "weak sources", *i.e.*, have SNR < 10. IRAS asteroid diameters derived from "weak sources" are systematically large by an average of ~33 percent with respect to ground-based observations. In our judgment, this effect was too large to ignore. We therefore decided to use the method originally proposed by Tedesco and Gradie (1988), *i.e.*, to use the results from ground-based IRTF observations to derive a statistical correction for those IRAS asteroids affected by the flux-overestimation problem.

The upper portion of Fig. 37 shows a plot of the IRAS SNR versus the ratio of the 25 μm flux density derived from ground-based (IRTF) observations to that reported by IRAS. The sample used consists of 801 accepted IRAS sightings for which high-quality albedos and diameters are available from IRTF observations by Gradie and Tedesco (1988). The albedo and diameter derived from each IRTF observation were used to predict the 25 μm flux density at the time of each IRAS sighting of that asteroid. The data were grouped into logarithmic bins 0.1 unit wide and the mean IRTF/IRAS flux density ratio and its standard deviation were then computed for each bin.

The quantities plotted were chosen to facilitate comparison between the flux overestimation correction method derived here and that used in correcting the PSC Ver. 1 flux densities (*cf., ES* Fig. XII.A.2, p. XII-6). Note that for SNR > 10 the agreement is good but that below this value the IRAS fluxes are systematically higher than those predicted on the basis of the IRTF observations.

Because the IRTF data do not have an SNR-imposed cutoff the fluxes derived from them do not have an SNR-related systematic error. We therefore derived a linear correction factor as a function of SNR based upon the departure between the IRTF and IRAS fluxes. The correction factor was 0.725 at SNR = 3.0 and 1.0 at SNR = 10.0.

The correction was applied to all detected fluxes with signal-to-noise ratios (SNR) between 3.0 and 10.0. The results of applying this correction factor to the IRAS measurements in the sample used to derive the correction factors is shown in the lower portion of Fig. 37.

To within the limits of measurement the correction factor at 12 μm is the same as that for 25 μm. Because no ground-based measurements are available at 60 μm we are unable to derive a correction for observations made in this band and simply assume that it is the same as that for the shorter bands. Thus, we subsequently applied this single correction factor to all IRAS asteroid detections with SNR < 10 before using them to derive IRAS albedos and diameters. This was done before iteratively computing the albedo and diameter. The flux uncertainty for corrected bands was increased by root-sum-squaring it

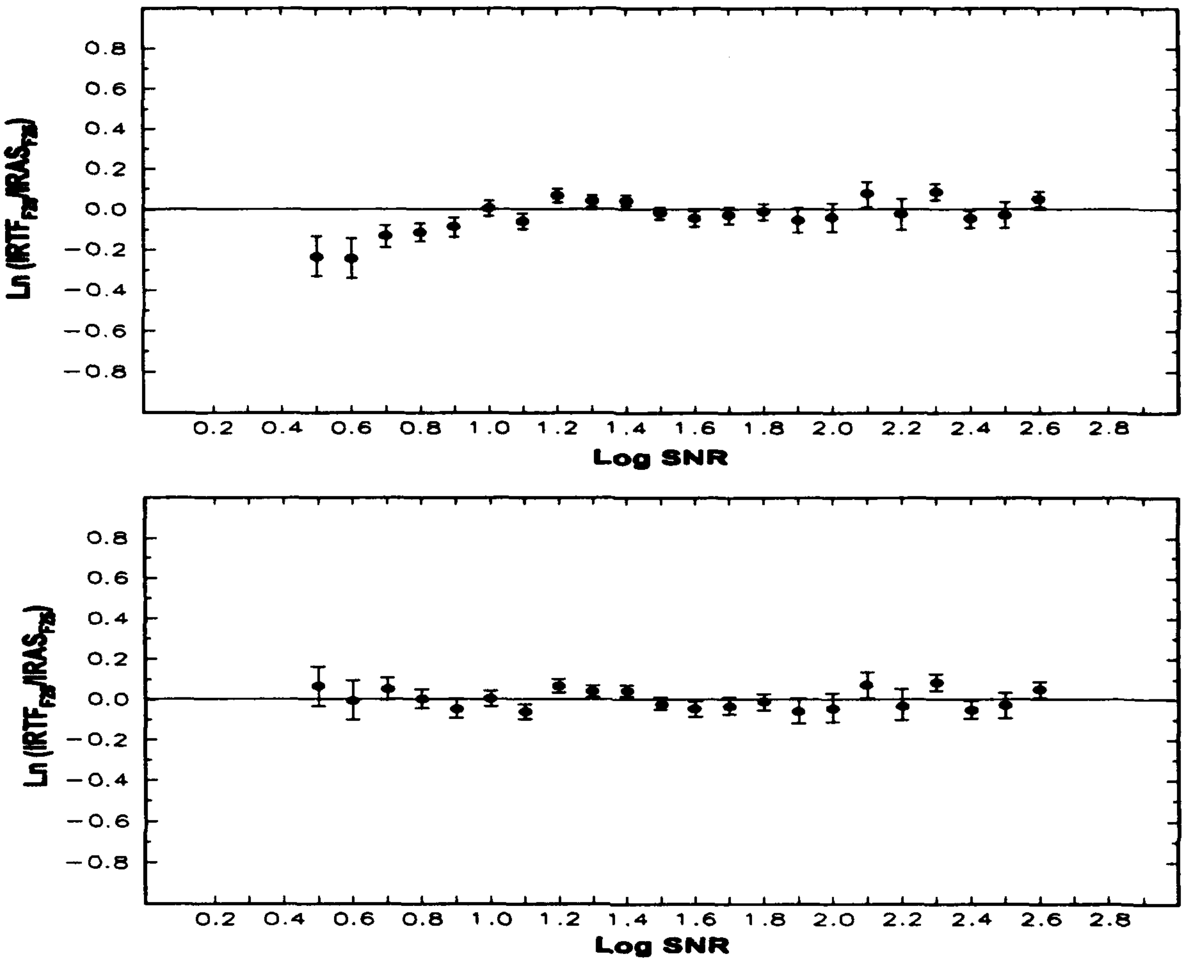


Figure 37. Common logarithm of the signal-to-noise versus the natural logarithm of the mean ratio of 25 μm flux densities from IRTF and IRAS observations per SNR bin. The uncorrected data are presented in the upper figure and the corrected in the lower.

with the flux correction. The flux overestimation correction factor, if any, applied to each accepted sighting is given in parameter FCorr in Final Data Product 108. See §4.3.4.C for further details on corrections applied to raw IRAS flux densities.

8.3.3 Band-to-Band Albedo Discrepancies

Albedos derived from uncorrected 25 or 60 μm IRAS fluxes are systematically about 10% higher than those derived from uncorrected 12 μm IRAS fluxes. This could, for example, be caused by an error in the IRAS flux calibration or an invalid assumption in the asteroid thermal model (perhaps the thermal emissivity and/or beaming

parameter are wavelength-dependent). Regardless of the cause, the effect is to introduce erroneous differences in the albedos derived from 12 μm detections and those derived from 25 and 60 μm detections.

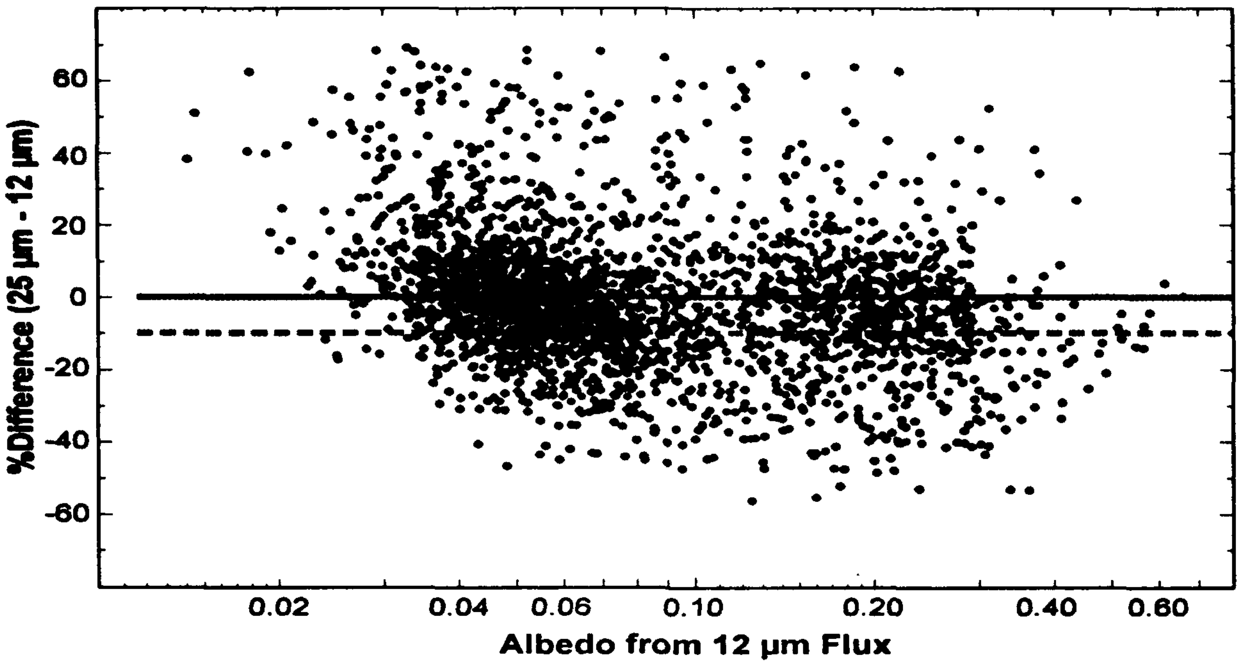
To eliminate this discrepancy we decided to adopt the albedos derived from either 12 μm or 25 μm detections as being "correct". To aid in this choice we compared the diameters based on 12 μm-only and 25 μm-only data with 13 asteroids with high-quality diameters obtained from stellar occultations. The mean difference between the occultation-derived diameters and the 12 μm-derived diameters was 6.5% while that for the 25 μm-derived diameters was 7.0%. We therefore adopted the 12 μm-derived diameters as being "correct". Subsequently, we learned that this choice is consistent with the IRAS calibration error discussed in Cohen *et al.*, (1992). Hence, we have applied a correction factor of 1.12 to the albedos (and therefore, indirectly, to the diameters computed from them) to all albedos derived from 25 μm and 60 μm fluxes (*cf.*, §4.3.4.C). Following this correction the mean difference between the occultation-derived diameters and the 25 μm-derived diameters was reduced to 6.7%

Table 9 presents statistics on the 12/25 μm and 12/60 μm distributions before and after application of the band-to-band correction.

Table 9. Sample Statistics for Corrected Versus Uncorrected 12 μm/25 μm and 12 μm/60 μm Albedos

Bands	N	Mean % Diff		Sample σ		% > 2 σ	
		Before	After	Before	After	Before	After
12/25	5,763	-9.9	+0.9	20.7	23.2	5.9	4.9
12/60	4,884	-11.1	-0.5	21.7	24.3	2.9	4.6

Figure 38 shows plots of the differences between albedos derived from 12 μm fluxes and those determined from 25 and 60 μm fluxes.



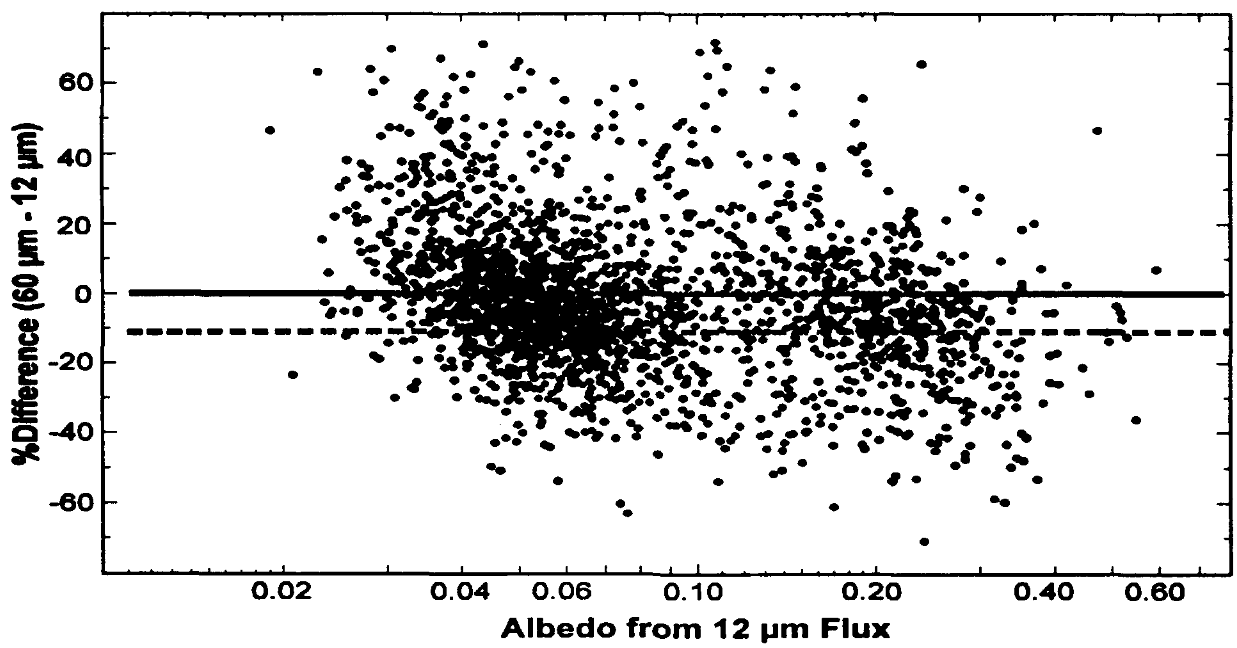


Figure 38. Comparison of model albedos obtained from data at 12, 25, and 60 µm. The 12 vs. 25 µm results are displayed at the top and the 12 vs. 60 µm results at the bottom. In each case the uncorrected mean difference is indicated by the dashed line and the corrected difference by the solid line. Due to the large size of the graphics file (~3 Mb) only every other data point is plotted in these figures.

The albedos and diameters given in the IMPS final data products (*i.e.*, in Final Product Numbers 102, 103, and 108) have had both the flux-overestimation and band-to-band corrections applied as follows. For each asteroid the flux-overestimation corrections were applied before the band-to-band corrections and these are given in Final Product 108 (parameter FCorr) for each sighting in each band. The flux-overestimation-corrected flux densities (parameter AstFlx in Final Product 108) were then used to compute an albedo, one for each band in which the asteroid was detected. The albedos derived from 25 and 60 μm detections were then multiplied by 1.12 and the individual single-band-single-sighting diameters were computed (parameter Diam in Final Product 108. Finally, all of the derived albedos (parameter Albedo in Final Product 108) were used to compute a mean albedo as described in §4.3.4.F (parameter p_H in Final Products 102 and 103) and then that mean albedo was used to compute the mean diameter (parameter D in Final Products 102 and 103) via Equ. 31.

After applying the corrections discussed above the data were again examined for systematic band-to-band effects. For the results presented in the Final Data Products the mean difference in albedos derived from 12 μm flux densities and those derived from 25 μm or 60 μm flux densities is less than 1% for the entire sample.

8.3.4 ADAS Versus IMPS Sightings of Numbered Asteroids

Using orbital elements for asteroids numbered through 3318 ADAS processing found 1,790 asteroids with one or more accepted sightings whereas the IMPS processing produced 1,678 such asteroids. As discussed in §8.3.1 above, this difference is due to the more-stringent positional match requirement used in the IMPS processing. The total number of asteroids with accepted IMPS sightings is 1,890 due to the greater number of available orbital elements. IMPS also produced fewer rejected asteroid sightings (and more missed sightings) than ADAS implying that the initial tagging by IMPS of an IRAS detection as a "potential sighting" is more reliable than the association method used in the ADAS processing.

Figure 39 presents these results in graphical form.

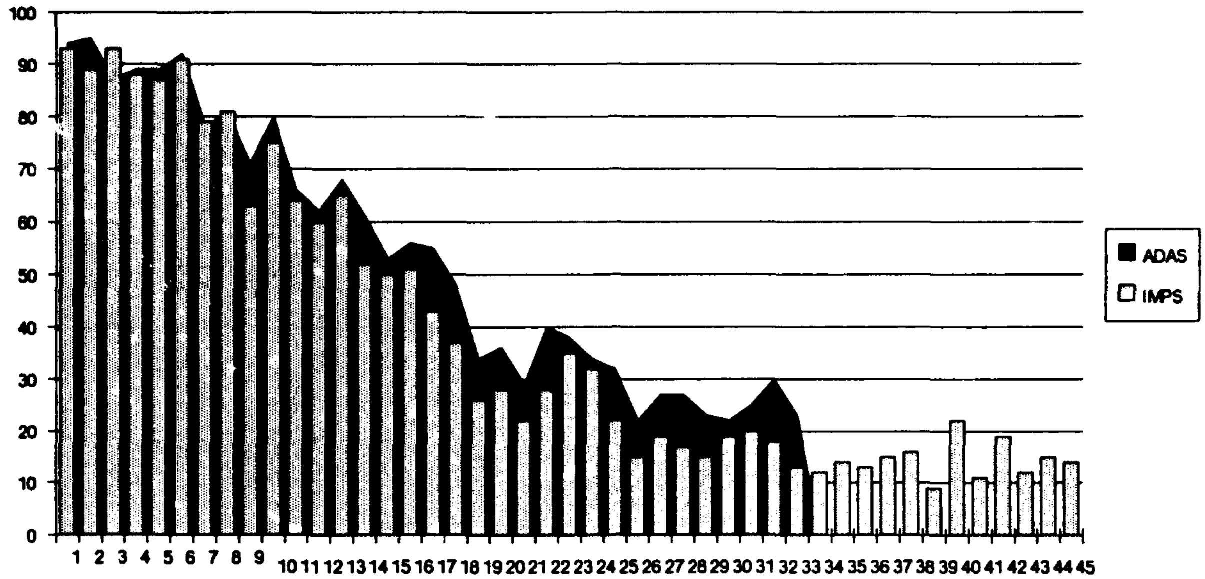


Figure 39. Percent of numbered asteroids with accepted ADAS and IMPS observations. The area and bar chart peaks represent the actual number of asteroids, per 100 asteroid wide bin, with accepted ADAS and IMPS observations, respectively. Note that ADAS has more accepted asteroid observations in most bins, a fact attributable to the less-stringent positional match requirement compared with that used in the IMPS processing. ADAS processed 3,318 numbered asteroids and IMPS 4,679. Note that more than 10% of asteroids with numbers greater than 2500 yield reliable data.

8.3.5 IMPS Versus ADAS Final Data Products

This section relates the Final Data Products (FDP) produced by the Asteroid Data Analysis Subsystem (ADAS) to those produced by the IRAS Minor Planet Survey. The names for the ADAS final products are accompanied by their original ADAS FDP (Final Data Product) numbers. These numbers are used uniformly throughout all of the ADAS documentation, whereas the descriptive names changed several times as the products evolved. The FDPs are arranged by ADAS number in Table 10. This table also gives other information about each FDP such as its file name and the disposition of changed, deleted or undelivered products.

Table 11 presents the relationship between the IMPS Final Products and the ADAS IRAS Asteroid and Comet Final Data Products.

Table 10. Correspondence Between ADAS IRAS Asteroid and Comet Final Data Products and their IMPS Counterparts

FDP No.	Name	Note(s)	Equivalent IMPS FP No(s).
1	Possible Asteroids/Comets	1	
2	Catalog of Asteroid Sightings	R	108
3	Probable Asteroids/Comets	2	
4	Asteroid Catalog	+, R	102, 103
5	Graphic Data	+	100
6	Asteroid Statistics	+, R	100, 104
7	Comet Catalog	+, R	
8	Fast Moving Objects	3	
9	Asteroid and Comet LRS Spectra	+, R	
10	Unknown Asteroids' LRS Spectra	2	
11	Master Asteroid Database	4	
12	Asteroid Names and Pointers	R	107
13	Asteroid Ground-Based Data	R	107
14	Deep Sky Asteroid Catalog	5	
15	Rejected Sightings	+, R	105
16	Asteroid and Comet Supplement		100

1. Not released. (This is IMPS input file IP01, also not released.)

2. Not produced.

3. All fast moving objects are listed in a table in FDP 16. Machine readable data are to be found in FDPs 2, 3 or 1.

4. Not produced. All of the information in this product can be obtained by merging FDP 1 and FDP 12.

5. Not produced. The IRAS Catalog of Pointed Observations was not available in time to be used to produce this data product. This was realized and discussed at the IRAS Asteroid Workshop No. 4 (see *IRAS Asteroid and Comet Survey, 1986*, page 19).

\+ Published in this Supplement (FDP 16).

R Released to (and available from) the NSSDC as a machine-readable data file. FDP No. 16 was also deposited at the NSSDC.

Table 11. Correspondence Between IMPS Final Products and their ADAS Asteroid and Comet Counterparts

Final Product Numbers	
IMPS	**ADAS**
100	5, 6, and 16
101	16 (Part I, App. B)
102	4
103	4
104	6
105	15
106	No equivalent
107	12, 13
108	2

8.4 Implications of the Observed Asteroid Albedo Size-Dependence

The albedo size-dependence is discussed in §7.4 via explication of the data from Final Product 102 (the IMPS Albedos and Diameters Catalog and Data Base), in particular with respect to Fig. 32. It is noted there that this effect may be real and due to the lack of a mature dusty regolith on many small asteroids (Veeder,1991).

This view is supported by results from ground-based observations as well. For example, Tedesco *et al.* (1990) computed the "10 μm albedo"/"20 μm albedo" ratio (p_{10}/p_{20}) for 352 dual-wavelength observations obtained in the Tedesco and Gradie IRTF Asteroid Radiometry Survey (Gradie and Tedesco, 1988) and then performed linear least-squares fits to this ratio versus the diameter, heliocentric distance at the time of observation, and the "10 μm albedo". They found that there is no correlation between the albedo ratio and the heliocentric distance or albedo but a strong correlation between the albedo ratio and the diameter. They concluded that the thermal properties of asteroids vary in a statistically significant way with size but not with albedo or distance. The sense of this variation is consistent with many smaller asteroids having surfaces with a larger rock/dust component (larger mean particle size) than the typical large asteroid.

If this is indeed the case, then radiometric observations of asteroids with diameters less than 30 km (and perhaps as large as 40 km) cannot be used to derive accurate albedos. Thus the statements made in §7.4 regarding the albedo distribution for small asteroids, while formally correct, are invalid if a significant fraction of small asteroids have surfaces with a larger mean particle size than larger asteroids. Under these conditions the standard thermal model can produce albedos which are too high by as much as a factor of two (*cf.*, Veeder et al., 1989a).

8.5 *Caveat Emptor*

Every effort has been made to weed out spurious asteroid detections. The IMPS Albedos and Diameters Catalog and Data Base (Final Product 102) is based upon those detections which passed all of our criteria for acceptance. Nevertheless, some of the entries in this catalog are based upon only a single scan, albeit in at least two bands, and so are not strongly confirmed. Single-scan-single-band observations have been segregated into the IMPS Singleton Catalog and Data Base (Final Product 103). The IMPS Sightings Data Base (Final Product 108), on the other hand, contains <u>all</u> sightings, including those at 100 μm, from every scan containing an accepted sighting. Those observations which were not used are flagged. They are included because some of them are probably valid detections. Decision as to which are useful, however, must be made on a case-by-case basis.

We have corrected a few differences between numbers appearing in the Catalogs herein and their Data Base versions. In all cases there was an extra digit in the Catalog value for a particular parameter (*e.g.*, 111.01 instead of 11.01, or 1.011 instead of 1.01) causing it to miss-align with adjacent rows. These spurious characters were apparently introduced when the Data Base files were read into the word processor and reformatted into tables. Although fewer than ten such discrepancies were found, clearly, should any differences be detected between the Catalog and Data Base versions, the Data Base value should be considered the correct one.

Part II: IMPS Data Products

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Chapter 9

OVERVIEW OF IMPS ASTEROID DATA PRODUCTS

E.F. Tedesco and G.J. Veeder

IMPS asteroid data products are of two types: "Catalogs", i.e., tables appearing in this book, and "Data Bases", i.e., ASCII data files. This chapter describes each of the eight data products, some of which consist of two or more files, and explains how to obtain the data bases.

Catalogs and Data Bases

Table 12 presents a concise summary of the available data products. With the exception of a portion of the *IMPS Ground-Based Data Catalog* (FP 107) and the entire *IMPS Sightings Data Base* (FP 108) all products exist as both a "Catalog", *i.e.*, as tables appearing in this book, and as a "Data Base", *i.e.*, as ASCII data file(s).

For the most part, the formats of the Catalog and Data Base versions of each data product are the same. In some cases, however, there are differences introduced to improve the readability of the Catalog version. These differences are noted in the appropriate places.

This document (FP 100), together with the machine-readable files of the final data products, constitute *The IRAS Minor Planet Survey Catalog and Database, 1992.* This supplants the 1986 version *IRAS Asteroid and Comet Database and Catalog.* See §1.3 for details on how to obtain these products.

See §8.3.6 for a cross reference between final data products from the *IRAS Asteroid and Comet Database and Catalog*, 1986 and *The IRAS Minor Planet Survey Catalog and Database*, 1992.

Table 12. IMPS Data Products

Final Product No. (Size in Kb)	Final Product Name	Remarks
100 (NA)	*The IRAS Minor Planet Survey*	This document.
101 (20)	IMPS Final Products Format Catalog	This catalog gives the formats of all the machine-readable data products.
102 (239)	IMPS Albedos and Diameters Catalog	A distilled summary of the averaged results for the 1,796 numbered asteroids and 88 unnumbered asteroids with at least two accepted observations.
103 (15)	IMPS Singleton Catalog	Same as Final Product 102 but for the 94 numbered and 26 unnumbered asteroids which have only a single accepted sighting in a single band.
104 (193)	IMPS Statistics Catalog	A summary of the number of times each asteroid was sighted, the number of times it was predicted to be scanned, and possible reasons for any failure to be detected.
105 (100)	IMPS Reject Catalog	A summary of the number of rejected sightings for each asteroid and possible reasons for their rejection.
106 (320)	IMPS Missed-Predictions Catalog	A summary of asteroids which were scanned by the IRAS focal plane array but which did not generate any associations.
107 (2,385)	IMPS Ground-Based Data Catalog	A listing of ground-based data used in IMPS data processing.
108 (4,538)	IMPS Sightings Data Base	A listing of 7,937 accepted sightings associated with 1,890 numbered asteroids and 273 accepted sightings associated with 114 unnumbered asteroids.

Chapter 10

IMPS FINAL PRODUCTS FORMAT CATALOG (FP 101)

Edward F. Tedesco, Glenn J. Veeder, and John W. Fowler

This catalog describes the data formats of the final data products from the IRAS Minor Planet Survey. As discussed in the previous chapter, these products are of two types: "Catalogs", i.e., tables appearing in this book, and "Data Bases", i.e., ASCII data files.

10.1 Definition of IMPS Final Product 101: IMPS Final Products Format Catalog

This final product, the Catalog version of which is this chapter, gives the formats of all the machine-readable IMPS final products (including this one). Short descriptions of each field are provided.

Definition of format for IMPS Final Product 101:

Title	—	IMPS FINAL PRODUCTS FORMAT CATALOG
Header	—	Parameter, Format, Unit, Remark
List	—	Parameters, PC code formats, units, and remarks

Note: For asteroid type 1, asteroid identification number < 4680
For asteroid type 2, asteroid identification number < 2633

10.2 Format of IMPS Final Product 102: IMPS Albedos and Diameters Data Base

This product presents the averaged results for 1,796 numbered asteroids and 88 type 2 asteroids which have at least two final accepted band observations used. The results are collated by asteroid in ascending numerical order for asteroid types 1 and 2. Entries include: asteroid type, identification number, name or provisional designation, H, average derived albedo and diameter and their sigmas, probability of light curve, number of sightings used, number of observations used (*i.e.*, values averaged), fraction of predicted sightings observed, and the 32-bit OR'd status word AStatW.

Table 13. Format of IMPS Albedos and Diameters Data Base (FP 102)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
Name	A16	—	Asteroid name or provisional designation(s)
H	F5.2	mag	Absolute visual magnitude
p_H	F6.4	—	Mean visual albedo (p_H)
σp_H	F5.3	—	1 sigma p_H
D	F7.2	km	Mean diameter
σD	F6.1	km	1 sigma diameter
PLC	F4.2	—	Probability light curve affected results
US	I2	—	Number of sightings used
UO	I2	—	Number of observations used
FOR	F4.2	—	Fraction of predicted sightings observed
AStatW	32I1	—	Or'd accepted status word

Number of columns: 96

10.3 Format of IMPS Final Product 103: IMPS Singleton Data Base

This data product is a summary of the results for 94 numbered asteroids and 26 type 2 asteroids which have only one final accepted band observation. Its format is identical to that of FP 102. The results are collated by asteroid in ascending numerical order for asteroid types 1 and 2. Entries include: asteroid type, identification number, name or provisional designation, H, average derived albedo and diameter and their sigmas, probability of light curve, number of sightings used, number of observations used (*i.e.*, values averaged), fraction of predicted sightings observed, and the 32-bit

OR'd status word AStatW. This format is identical to that for FP 102, hence, the presence of some counters which can only have values of unity.

Table 14. Format of IMPS Singleton Data Base (FP 103)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
Name	A16	—	Asteroid name or provisional designation(s)
H	F5.2	mag	Absolute visual magnitude
p_H	F6.4	—	Mean visual albedo (p_H)
σp_H	F5.3	—	1 sigma p_H
D	F7.2	km	Mean diameter
σD	F6.1	km	1 sigma diameter
PLC	F4.2	—	Probability light curve affected results
US	I2	—	Number of sightings used (always equal to one)
UO	I2	—	Number of observations used (always equal to one)
FOR	F4.2	—	Fraction of predicted sightings observed
AStatW	32I1	—	Or'd accepted status word

Number of columns: 96

10.4 Format of IMPS Final Product 104: IMPS Statistics Data Base

Summary of the number of times each asteroid was sighted, the number of times it was predicted to be scanned, and possible reasons for any failure to be detected. There is an entry for each of 4,679 numbered asteroids and 2,632 type 2 asteroids (including those for which no IMPS sightings exist) collated by asteroid in ascending numerical order for types 1 and 2. Entries include: asteroid type, identification number, number of predicted sightings, number of accepted sightings, number of rejected sightings, number of missed predicted sightings, number of missed predicted faint sightings, number of dead 25 μm detector non-detections, number of noisy 25 μm detector non-detections, number of missed predictions in the galactic center region, and other non-detections. (See also Table 24, p. 292.)

Table 15. Format of IMPS Statistics Data Base (FP 104)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
P	I2	—	Number of predicted sightings
S	I2	—	Number of accepted sightings
R	I2	—	Number of rejected sightings
M	I2	—	Number of missed predicted sightings
F	I2	—	Number with predicted fluxes too low to expect a detection
D	I2	—	Number of dead 25 μm detector non-detections
N	I2	—	Number of noisy 25 μm detector non-detections
G	I2	—	Number of galactic center matches
X	I2	—	Other non-detections

Number of columns: 25

10.5 Format of IMPS Final Product 105: IMPS Reject Data Base

Summary of the number of rejected sightings for each asteroid and possible reasons for rejection. There is an entry for each of 1,732 numbered asteroids and 655 type 2 asteroids for which at least one sighting was rejected, collated by asteroid in ascending numerical order for types 1 and 2. Entries include: asteroid type, identification number, number of rejected sightings, number of weeks-confirmed (MCON) sightings, number of sightings confused with sources in the *IRAS Point Source Catalog* (PSC) Version 2, number of sightings whose detectors were all outer slots only (*i.e.*, at the edge of the survey array), number of sightings confused with sources in the *IRAS Faint Source Survey* (FSS) Version 2, number of sightings confused with sources in the *IRAS Serendipitous Survey Catalog* (SSC), number of times more than one source was associated with a single asteroid prediction, number of sightings with position match scores below the final threshold, 0.4 (these sightings are a subset of those with AStatW bit no. 1 set), number of sightings detected only at 25 μm with flux status less than 5 (*i.e.*, not fully seconds-confirmed), number of singletons with flux status less than 5, number of sightings with uniform cross-scan uncertainties above 5 arcminutes, number of times the color test failed, number of sightings with at least one band having an unacceptable confusion status, number of sightings in which at least one band had an unacceptably low detection correlation coefficient, number of rejected sightings in which the low-albedo test failed in at least one band, number of rejected sightings in which an albedo solution failed to converge in at least one band, and the number of rejected sightings in which an albedo was rejected from the final average by the Chauvenet criterion in at least one band. (See also Table 25, page 340.)

Table 16. Format of IMPS Reject Data Base (FP 105)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
R	I2	—	Number of rejected sightings
M	I2	—	Number of MCON sightings (AStatW bit 5)
P	I2	—	Number of PSC matches (AStatW bit 9)
O	I2	—	Number of outer slot only detections (AStatW bit 0)

Parameter	Format	Units	Remarks
F	I2	—	Number of FSC matches (AStatW bit 17)
S	I2	—	Number of SSC matches (AStatW bit 20)
I	I2	—	Number of 2+ sightings matches (AStatW bit 31)
L	I2	—	Number of low position-match score
B	I2	—	Number of band-2-only with flux status < 5
Z	I2	—	Number of singletons with flux status < 5
U	I2	—	Number of cross-scan uncertainty > 5'
C	I2	—	Number of asteroid color test failures
Q	I2	—	Number of confusion status failures
D	I2	—	Number of correlation coefficient failures
A	I2	—	Number of non-physically low albedos (< 0.01)
N	I2	—	Number of albedo solutions not converged
E	I2	—	Number of albedos eliminated by Chauvenet's criterion

Number of columns: 41

10.6 Format of IMPS Final Product 106: IMPS Missed-Predictions Data Base

Summary of the always-missed asteroids, *i.e.*, those asteroids which were predicted to have crossed the IRAS focal plane array but which were never detected. The entries are collated by predicted asteroid in ascending numerical order for types 1 and 2. Entries include the asteroid type, identification number, number of times predicted to be scanned but missed, and the derived greatest lower limit on the albedo range and least upper limit on the diameter range for each asteroid plus the analogous OR'd AStatW status word. There is an entry for each of 1,653 numbered asteroids and 1,765 type 2 asteroids which were scanned but did not generate any IMPS asteroid associations. Entries include: asteroid number, type, name for type 1 and provisional designation for type 2, number of missed predicted scans, H, G, estimated visual albedo and diameter, the greatest lower bound on the albedo, the least upper bound

on the diameter and the OR'd prediction status word. (See also Table 26, page 367 for the format of the Catalog and Table 27, page 368 for an explication of the MPStatW status word.

Table 17. Format of IMPS Missed-Predictions Data Base (FP 106)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
Name	A16	—	Asteroid name or provisional designation(s)
NMiss	I2	—	Number of missed predicted scans
HMist	F5.2	mag	Absolute visual magnitude
GMist	F6.3	—	Slope parameter
AlbMst	F6.4	—	Visual albedo estimate
DiaMst	F7.2	km	Diameter estimate
AlbGLB	F6.4	—	Greatest lower albedo limit
DiamLUB	F7.2	mag	Least upper diameter limit
MPStatW	32I1	—	OR'd prediction status word

Number of columns: 94

10.7 Format of IMPS Final Product 107: IMPS Ground-Based Data Data Base

A listing of ground-based and *IRAS Asteroid and Comet Catalog* (1986) data used to reduce the IMPS observations. There is an entry for each of 4,679 numbered asteroids and 2,632 type 2 asteroids (including those for which no IMPS sightings exist) collated by asteroid in ascending numerical order for types 1 and 2. Entries include: asteroid type, identification number, name (or provisional designation if unnamed) for type 1 and provisional designation for type 2, H, G, the estimated (0.01

default) geometric visual albedo, the estimated diameter, the adopted taxonomic classification, and the orbital elements at three epochs (time of perihelion passage, mean anomaly, argument of perihelion, longitude of ascending node, inclination, eccentricity and perihelion distance; the Julian dates of the epochs are 2445400.5, 2445500.5, and 2445600.5).

Because the total number of columns of data exceeds 255 (a limit we chose not to exceed), Final Product 107 is divided into four files named FP 107.A, FP 107.B, FP 107.C, and FP 107.D, with the formats given below.

Table 18. Format of IMPS Ground-Based Data Data Base (FP 107A)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
Name	A16	—	Asteroid name or provisional designation(s)
H	F5.2	mag	Absolute visual magnitude
G	F6.3	—	Slope parameter
Alb	F6.4	—	Visual albedo estimate (default = 0.01)
D	F7.2	km	Diameter estimate
Class	A3	—	Taxonomic classification

Number of columns: 50

Table 19. Format of IMPS Ground-Based Data Data Base (FP 107.B, .C, and .D)

Parameter[1]	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
EPnUT	F14.5	JD	Time of perihelion passage
Mn	F11.6	deg	Mean anomaly
APn	F11.6	deg	Argument of perihelion
LAn	F11.6	deg	Longitude of ascending node
In	F11.6	deg	Inclination
En	F9.6	—	Eccentricity
PDnAU	F9.6	AU	Perihelion distance
An	F9.6	AU	Semimajor axis

[1]The lower case "n" in the parameter names is 1, 2, and 3 for FP 107B, FP 107.C, and FP 107.D, respectively; these three files have identical formats and correspond to epochs at Julian dates of 2445400.5, 2445500.5, and 2445600.5, respectively.

Number of columns: 92

10.8 Format of IMPS Final Product 108: IMPS Sightings Data Base

A listing of 7,937 accepted sightings associated with 1890 numbered asteroids and 273 accepted sightings associated with 114 type 2 asteroids. The sightings are collated by asteroid in ascending numerical order for types 1 and 2. Entries include: asteroid type, identification number, SOP and OBS numbers, observed right ascension and declination, ecliptic longitude and latitude, galactic longitude and latitude positions, heliocentric distance, geocentric distance, phase, predicted right ascension and declination position, predicted apparent visual magnitude, predicted flux density, in and cross-scan uncertainties, the position match score, the difference between the predicted and observed position, the factor used to correct for low flux over-estimation, the corrected flux density observed, the flux density sigma, the signal to noise ratio,

the derived visual albedo, the derived diameter, the detector ID array, the correlation coefficients, the derived status word, the confusion status word, the flux status, and the sighting status word.

Because the total number of columns of data exceeds 255 (a limit we chose not to exceed), Final Product 108 is broken up into three files named FP 108.A, FP 108.B, and FP 108.C, with the formats given below.

Table 20. Format of IMPS Sightings Data Base (FP 108.A)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
ObsDate	I2	—	Month of observation (year is 1983 for all)
	I2	day	Day of month of observation
ObsTime	I2	hr	Hour of observation (UTC)
	I2	min	Minute of observation (UTC)
	I2	sec	Second of observation (UTC)
AstNam	I9	decisec	Sighting time tag
SOP	I3	—	SOP number
OBS	I2	—	OBS number
ObsRA	I2	hr	Right Ascension (observed)
	I2	min	
	F4.1	sec	
ObsDec	I3	deg	Declination (observed)
	I2	min	
	I2	sec	
AstGaC	F5.1	deg	Celestial twist angle

Parameter	Format	Units	Remarks
AstELong	F8.4	deg	Ecliptic longitude
AstELat	F8.4	deg	Ecliptic latitude
AstGLong	F8.4	deg	Galactic longitude
AstGLat	F8.4	deg	Galactic latitude
PrdRAS	F6.3	AU	Heliocentric distance
PrdREA	F6.3	AU	Geocentric distance
PrdAlp	F7.2	deg	Phase angle (negative before opposition)
PrdRA	I2	hr	Right ascension (predicted)
	I2	min	" "
	F4.1	sec	" "
PrdDec	I3	deg	Degree declination (predicted)
	I2	arcmin	" "
	I2	arcsec	" "
V	F5.2	mag	Apparent visual magnitude (predicted)
Albedo	4F6.4	—	Derived visual albedo (four bands)
AlbedoUnc	4F6.4	—	1-sigma uncertainties in Albedo
Diam	4F7.2	km	Derived diameter (four bands)
DiamUnc	4F7.2	km	1-sigma uncertainties in Diam

No. columns: 226

Table 21. Format of IMPS Sightings Data Base (FP 108.B)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
ObsDate	I2	—	Month of observation (year is 1983 for all)
	I2	day	Day of month of observation
ObsTime	I2	hr	Hour of observation (UTC)
	I2	min	Minute of observation (UTC)
	I2	sec	Second of observation (UTC)
AstSgY	F5.3	arcmin	1-sigma in-scan uncertainty
AstSgZ	F5.3	arcmin	1-sigma cross-scan uncertainty
AstLZ	F6.3	arcmin	Cross-scan uncertainty half-width
Score	F5.3	—	Position match score
PosDiff	F7.1	arcsec	Position difference |pred - obs|
FCorr	4F5.3	—	Low-flux correction factor (four bands)
PrdFlx	4F7.3	Jy	Predicted flux density (four bands)
AstFlx	4F8.3	Jy	Observed flux density (four bands)
AstSgF	4F8.3	Jy	Flux-density sigma (four bands)
AstSNR	4F7.2	—	Signal-to-noise ratio (four bands)

No. columns: 185

Table 22. Format of IMPS Sightings Data Base (FP 108.C)

Parameter	Format	Units	Remarks
AstTyp	I2	—	Asteroid type
AstID	I5	—	Asteroid number
ObsDate	I2	—	Month of observation (year is 1983 for all)
	I2	day	Day of month of observation
ObsTime	I2	hr	Hour of observation (UTC)
	I2	min	Minute of observation (UTC)
	I2	sec	Second of observation (UTC)
AstDts	4I5	—	Detector id array (four bands)
AstCor	4I3	—	Correlation coefficients (four bands)
ADStat	4I8	—	Derived status word bits (four bands)
AstCSt	4I8	—	Confusion status word bits (four bands)
AstFSt	4I1	—	Flux status word (four bands)
AStatW	32I1	—	Sighting status word bits

No. columns: 149

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Chapter 11

IMPS GROUND-BASED DATA CATALOG (FP 107)

Edward F. Tedesco

This catalog contains the ground-based data used in processing potential asteroid sources from the IRAS Minor Planet Survey. See the previous chapter for the format of the data base (i.e., machine-readable version) which differs from that of the catalog presented here.

This catalog presents the ground-based data for 4,679 numbered asteroids and 2,632 type 2 asteroids. This constitutes the entire input data set processed by IMPS.

The format is virtually the same as the data base file FP107.A, omitting only the taxonomic class, but reformatted for clarity (*cf.*, Table 18, page 160). Printed versions of the orbital elements used are not provided. They are available in machine-readable form only (in files FP 107.B, FP 107.C, and FP 107.D).

The results are collated by asteroid in ascending numerical order for asteroid types 1 and 2. Entries include: asteroid type, identification number, name (or provisional designation) for asteroid type 1 and provisional designation for asteroid type 2. For numbered asteroids (ID Type 1) the absolute magnitude (H) and slope parameter (G) and the input visual geometric albedo (p_H) and diameter (D) in kilometers are given. The albedo and diameter used are from the *IRAS Asteroid and Comet Survey, 1986* or, in the absence of such data, from an adopted albedo of 0.01 and the diameter corresponding to that albedo. For the ID Type 2 (unnumbered) asteroids only the absolute magnitude (H) and input diameter (D) in kilometers are given because default values of 0.15 for the slope parameter (G) and 0.01 for the input visual geometric albedo (p_H) were used for all.

The default value of 0.15 for the slope parameter is based upon the IAU convention, adopted at the 1991 General Assembly in Buenos Aires (*cf.*, Tedesco, 1990). The (unrealistically low) value for the default albedo (0.01) was chosen so as to maximize the input diameter, and thus the predicted flux, to mitigate against failing to make an association because the predicted flux was below the instrument's detection threshold.

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1	3.34	0.12	0.100	910.03	51	7.35	0.08	0.086	152.03
2	4.13	0.11	0.140	521.03	52	6.31	0.18	0.057	311.03
3	5.33	0.32	0.220	243.03	53	8.81	0.15	0.045	119.02
4	3.20	0.32	0.380	500.03	54	7.66	0.15	0.050	170.02
5	6.85	0.15	0.140	124.02	55	7.8	0.15	0.320	67.02
6	5.71	0.24	0.250	191.03	56	8.31	0.15	0.062	117.02
7	5.51	0.15	0.210	202.02	57	7.03	0.15	0.210	116.02
8	6.49	0.28	0.220	141.03	58	8.86	0.15	0.056	97.02
9	6.28	0.17	0.01	737.23	59	7.93	0.15	0.048	173.02
10	5.43	0.15	0.075	427.02	60	8.21	0.27	0.150	61.03
11	6.55	0.15	0.150	161.02	61	7.68	0.15	0.210	83.02
12	7.24	0.22	0.160	116.03	62	8.76	0.15	0.090	99.02
13	6.74	0.15	0.099	214.02	63	7.55	0.25	0.170	108.03
14	6.30	0.15	0.01	730.52	64	7.67	0.48	0.01	388.73
15	5.28	0.23	0.190	271.03	65	6.62	0.01	0.057	244.03
16	5.90	0.20	0.100	263.03	66	9.36	0.15	0.050	78.02
17	7.76	0.15	0.150	93.02	67	8.28	0.15	0.210	60.02
18	6.51	0.25	0.220	147.03	68	6.78	0.05	0.200	127.03
19	7.13	0.10	0.01	498.43	69	7.05	0.19	0.120	142.03
20	6.50	0.25	0.190	150.03	70	8.11	0.14	0.070	126.03
21	7.35	0.11	0.200	99.03	71	7.30	0.40	0.280	87.03
22	6.45	0.21	0.120	186.03	72	8.94	0.15	0.056	89.02
23	6.95	0.15	0.210	111.02	73	9.0	0.15	0.210	45.01
24	7.08	0.19	0.01	510.03	74	8.66	0.15	0.034	122.02
25	7.83	0.15	0.220	78.02	75	8.96	0.23	0.120	58.03
26	7.5	0.15	0.160	98.02	76	7.90	0.15	0.029	190.02
27	7.0	0.15	0.01	529.22	77	8.52	0.16	0.130	70.03
28	7.09	0.15	0.150	126.02	78	8.09	0.08	0.064	125.03
29	5.85	0.20	0.160	219.03	79	7.96	0.25	0.270	68.03
30	7.57	0.15	0.130	104.02	80	7.98	0.15	0.150	81.02
31	6.74	0.15	0.070	247.02	81	8.48	0.15	0.046	124.02
32	7.56	0.15	0.250	82.02	82	8.40	0.28	0.170	63.03
33	8.55	0.33	0.01	259.23	83	8.66	0.15	0.069	84.02
34	8.51	0.15	0.057	118.02	84	9.32	0.15	0.070	82.02
35	8.5	0.15	0.058	108.02	85	7.61	0.15	0.068	156.02
36	8.46	0.15	0.076	109.02	86	8.53	0.15	0.043	126.02
37	7.29	0.24	0.170	112.03	87	6.94	0.15	0.040	270.02
38	8.32	0.15	0.058	120.02	88	7.04	0.14	0.01	519.53
39	6.1	0.15	0.290	158.02	89	6.60	0.15	0.160	158.03
40	7.0	0.15	0.200	110.02	90	8.27	0.15	0.051	124.02
41	7.12	0.10	0.073	181.03	91	8.84	0.15	0.042	113.02
42	7.53	0.15	0.120	106.02	92	6.61	0.15	0.200	131.02
43	7.93	0.11	0.280	65.03	93	7.51	-.10	0.085	145.02
44	7.03	0.46	0.490	73.03	94	7.57	0.15	0.038	211.02
45	7.46	0.07	0.048	213.03	95	7.84	0.15	0.062	144.02
46	8.36	0.06	0.046	131.03	96	7.67	0.15	0.038	174.02
47	7.84	0.16	0.072	132.03	97	7.63	0.15	0.190	86.02
48	6.90	0.15	0.064	225.02	98	8.84	0.15	0.041	108.02
49	7.8	0.15	0.051	153.02	99	9.43	0.15	0.01	172.82
50	9.24	0.15	0.01	188.62	100	7.67	0.15	0.160	91.02

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
101	8.33	0.35	0.150	68.03	151	9.24	0.15	0.140	46.02
102	9.26	0.15	0.049	85.02	152	8.33	0.15	0.01	286.82
103	7.66	0.15	0.170	94.02	153	7.48	0.15	0.060	175.02
104	8.27	0.15	0.052	127.02	154	7.58	0.15	0.070	191.02
105	8.57	0.10	0.032	123.03	155	11.39	0.15	0.021	49.02
106	7.41	0.15	0.083	151.02	156	8.64	0.15	0.040	126.02
107	7.08	0.08	0.060	237.03	157	10.6	0.15	0.150	19.01
108	8.09	0.15	0.190	67.02	158	9.27	0.15	0.170	39.02
109	8.75	0.04	0.060	91.03	159	8.12	0.15	0.061	131.02
110	7.80	0.20	0.170	88.03	160	9.08	0.15	0.059	84.02
111	8.02	0.15	0.064	139.02	161	9.15	0.13	0.120	45.03
112	9.84	0.15	0.037	75.02	162	8.83	0.15	0.047	105.02
113	8.74	0.35	0.270	47.03	163	9.47	-.04	0.047	76.03
114	8.26	0.15	0.084	103.02	164	8.80	0.15	0.053	109.02
115	7.51	0.12	0.250	83.03	165	7.44	0.15	0.069	160.02
116	7.82	0.15	0.220	75.02	166	9.89	0.15	0.01	139.82
117	7.95	0.15	0.040	154.02	167	9.24	0.15	0.210	42.02
118	9.14	0.15	0.200	45.02	168	7.94	0.15	0.050	153.02
119	8.42	0.15	0.170	60.02	169	9.56	0.15	0.190	36.02
120	7.75	0.15	0.045	178.02	170	9.39	0.15	0.140	46.02
121	7.31	0.15	0.042	216.02	171	8.31	0.15	0.053	121.02
122	7.87	0.15	0.200	86.02	172	8.79	0.15	0.120	64.02
123	8.89	0.15	0.190	49.02	173	7.66	0.01	0.053	159.03
124	8.11	0.19	0.150	79.03	174	8.48	0.15	0.140	71.02
125	9.04	0.33	0.180	47.03	175	8.31	0.15	0.065	107.02
126	9.27	0.15	0.150	46.02	176	7.9	0.15	0.053	124.01
127	8.3	0.15	0.01	290.81	177	9.49	0.15	0.048	75.02
128	7.49	0.15	0.045	194.02	178	9.38	0.15	0.210	37.02
129	7.07	0.33	0.170	124.03	179	8.15	0.15	0.140	80.02
130	7.11	0.15	0.089	188.02	180	10.31	0.15	0.110	32.02
131	10.03	0.15	0.095	43.02	181	7.84	0.15	0.120	107.02
132	9.38	0.15	0.140	46.02	182	9.12	0.15	0.160	45.02
133	7.98	0.13	0.210	69.03	183	9.68	0.15	0.160	35.02
134	8.76	0.28	0.041	121.03	184	8.31	0.15	0.180	68.02
135	8.23	0.15	0.130	81.02	185	7.62	0.15	0.053	164.02
136	9.69	0.15	0.130	41.02	186	8.91	0.15	0.150	52.02
137	8.05	0.15	0.048	150.02	187	8.16	0.15	0.053	135.02
138	8.75	0.15	0.180	47.02	188	9.22	0.15	0.190	41.02
139	7.78	0.15	0.051	162.02	189	9.33	0.15	0.180	38.02
140	8.34	0.15	0.071	114.02	190	7.59	0.15	0.01	403.32
141	8.2	0.15	0.036	135.01	191	9.07	0.15	0.041	105.02
142	10.27	0.15	0.042	57.02	192	7.13	0.03	0.210	107.03
143	9.12	0.15	0.041	92.02	193	9.68	0.15	0.01	154.02
144	7.91	0.17	0.059	146.03	194	7.68	0.15	0.050	174.02
145	8.13	0.15	0.044	154.02	195	9.01	0.15	0.053	89.02
146	8.20	0.11	0.052	136.03	196	6.55	0.15	0.180	145.02
147	8.27	0.15	0.029	137.02	197	9.18	0.15	0.270	32.02
148	7.64	0.15	0.140	104.02	198	8.33	0.15	0.190	58.02
149	10.79	0.15	0.150	22.02	199	8.3	0.15	0.130	62.01
150	8.23	0.15	0.034	157.02	200	8.26	0.15	0.053	132.02

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
201	8.43	0.24	0.140	70.03	251	10.0	0.15	0.170	31.01
202	7.42	0.15	0.170	85.02	252	9.1	0.15	0.052	72.01
203	8.76	0.15	0.029	120.02	253	10.2	0.15	0.036	60.01
204	8.89	0.15	0.170	50.02	254	12.13	0.15	0.130	14.02
205	9.23	0.15	0.061	83.02	255	10.39	0.15	0.038	58.02
206	8.68	0.15	0.01	244.12	256	9.8	0.15	0.044	66.01
207	9.92	0.15	0.050	60.02	257	9.47	0.15	0.070	73.02
208	8.96	0.15	0.210	44.02	258	8.50	0.23	0.150	67.03
209	8.24	0.15	0.044	148.02	259	7.76	0.15	0.037	184.02
210	9.33	0.15	0.041	89.02	260	8.97	0.15	0.034	101.02
211	7.89	0.12	0.059	147.03	261	9.44	0.19	0.100	52.03
212	8.28	0.15	0.046	139.02	262	11.67	0.15	0.01	61.62
213	8.64	0.15	0.072	84.02	263	10.40	0.15	0.140	27.02
214	9.50	0.51	0.400	26.03	264	8.42	0.15	0.270	53.02
215	9.59	0.15	0.180	37.02	265	11.2	0.15	0.054	30.01
216	7.30	0.29	0.088	139.03	266	8.80	0.15	0.054	113.02
217	9.8	0.15	0.01	145.71	267	10.5	0.15	0.034	53.01
218	8.60	0.32	0.150	61.03	268	8.28	0.15	0.038	142.02
219	9.32	0.15	0.150	43.02	269	9.5	0.15	0.068	54.01
220	11.0	0.15	0.066	30.01	270	8.75	0.15	0.190	52.02
221	7.67	0.13	0.120	109.03	271	9.80	0.15	0.058	61.02
222	9.13	0.15	0.082	57.02	272	10.7	0.15	0.100	28.01
223	9.68	0.15	0.022	90.02	273	10.26	0.15	0.120	32.02
224	8.59	0.15	0.01	254.42	274	10.1	0.15	0.170	30.01
225	8.72	0.15	0.041	124.02	275	8.85	0.15	0.036	121.02
226	9.75	0.15	0.130	39.02	276	8.56	0.15	0.041	127.02
227	8.7	0.15	0.056	89.01	277	9.84	0.15	0.210	29.02
228	12.48	0.15	0.120	10.02	278	9.4	0.15	0.210	38.01
229	9.13	0.15	0.037	95.02	279	8.57	0.15	0.030	134.02
230	7.35	0.27	0.140	112.03	280	11.19	0.15	0.033	48.02
231	9.2	0.15	0.042	84.01	281	12.02	0.28	0.140	13.03
232	10.25	0.15	0.045	55.02	282	10.91	0.15	0.043	40.02
233	8.21	0.15	0.073	107.02	283	8.72	0.15	0.025	150.02
234	9.02	0.15	0.220	44.02	284	10.05	0.11	0.055	54.03
235	8.82	0.15	0.150	60.02	285	10.5	0.15	0.037	48.01
236	8.18	-.02	0.100	90.03	286	8.98	0.15	0.043	96.02
237	9.24	0.15	0.150	44.02	287	8.30	0.22	0.160	70.03
238	8.18	0.15	0.032	155.02	288	9.84	0.15	0.110	37.02
239	10.3	0.15	0.054	42.01	289	9.51	0.15	0.140	41.02
240	9.00	0.15	0.039	107.02	290	11.5	0.15	0.01	66.61
241	7.58	0.15	0.062	168.02	291	11.45	0.15	0.140	17.02
242	9.7	0.15	0.140	41.01	292	10.24	0.15	0.110	34.02
243	9.94	0.15	0.160	32.02	293	9.94	0.15	0.055	57.02
244	12.2	0.15	0.100	13.01	294	9.6	0.15	0.045	59.01
245	7.82	0.15	0.160	84.02	295	10.19	0.15	0.150	30.02
246	8.62	0.15	0.130	63.02	296	12.62	0.15	0.01	39.82
247	8.04	0.15	0.059	137.02	297	9.5	0.15	0.140	45.01
248	10.21	0.15	0.057	51.02	298	11.0	0.15	0.01	83.91
249	11.33	0.15	0.041	37.02	299	11.4	0.15	0.081	21.01
250	7.58	0.15	0.180	85.02	300	9.6	0.15	0.033	78.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
301	10.1	0.15	0.056	55.01	351	8.98	0.15	0.200	44.02
302	10.89	0.15	0.045	40.02	352	10.01	0.15	0.310	22.02
303	8.7	0.15	0.047	102.01	353	11.0	0.15	0.01	83.91
304	9.74	0.07	0.047	68.03	354	6.44	0.37	0.190	162.03
305	8.77	0.15	0.160	50.02	355	10.4	0.15	0.160	25.01
306	8.96	0.15	0.170	49.02	356	8.22	0.15	0.062	134.02
307	10.12	0.15	0.053	57.02	357	8.72	0.15	0.048	110.02
308	8.17	0.21	0.043	147.03	358	9.1	0.15	0.050	91.01
309	10.4	0.15	0.037	54.01	359	8.86	0.15	0.150	47.02
310	10.3	0.15	0.087	36.01	360	8.48	0.15	0.052	121.02
311	9.89	0.15	0.200	27.02	361	8.22	0.15	0.039	148.02
312	8.89	0.15	0.180	51.02	362	9.00	0.15	0.01	210.72
313	8.91	0.15	0.050	100.02	363	9.01	0.15	0.01	209.72
314	9.5	0.15	0.057	61.01	364	9.86	0.15	0.200	31.02
315	13.2	0.15	0.01	30.51	365	9.18	0.15	0.029	110.02
316	9.8	0.15	0.018	49.01	366	8.5	0.15	0.076	97.01
317	10.03	0.15	0.290	22.02	367	10.7	0.15	0.140	22.01
318	9.40	0.15	0.01	175.22	368	9.93	0.15	0.032	74.02
319	9.8	0.15	0.028	73.01	369	8.52	0.15	0.170	62.02
320	10.7	0.15	0.01	96.31	370	10.68	0.15	0.01	97.22
321	10.04	0.15	0.150	31.02	371	8.72	0.15	0.160	56.02
322	9.01	0.15	0.080	73.02	372	7.2	0.15	0.054	194.01
323	9.73	0.15	0.160	37.02	373	9.13	0.15	0.038	99.02
324	6.82	0.09	0.057	241.03	374	8.67	0.15	0.190	48.02
325	8.65	0.15	0.073	77.02	375	7.47	0.27	0.01	426.23
326	9.36	0.15	0.039	99.02	376	9.49	0.15	0.220	36.02
327	10.1	0.15	0.110	35.01	377	8.89	0.15	0.051	94.02
328	8.6	0.15	0.028	120.01	378	9.80	0.15	0.170	31.02
329	9.66	0.15	0.037	80.02	379	8.87	0.15	0.045	95.02
330	12.6	0.15	0.01	40.11	380	9.42	0.15	0.051	76.02
331	9.62	0.15	0.040	78.02	381	8.25	0.15	0.045	124.02
332	9.5	0.15	0.170	44.01	382	8.77	0.15	0.130	60.02
333	9.46	0.15	0.042	81.02	383	9.91	0.15	0.072	49.02
334	7.64	0.15	0.064	169.02	384	9.64	0.15	0.160	38.02
335	8.96	0.15	0.053	93.02	385	7.49	0.15	0.200	93.02
336	9.75	0.13	0.042	71.03	386	7.43	0.16	0.063	173.03
337	8.74	0.19	0.130	63.03	387	7.41	0.15	0.160	106.02
338	8.50	0.15	0.170	62.02	388	8.57	0.07	0.053	120.03
339	9.24	0.15	0.160	43.02	389	7.88	0.15	0.200	81.02
340	9.9	0.15	0.110	32.01	390	10.39	0.15	0.190	26.02
341	10.55	0.15	0.260	16.02	391	10.1	0.15	0.01	126.91
342	10.22	0.15	0.036	64.02	392	9.7	0.15	0.051	64.01
343	11.56	0.15	0.099	20.02	393	8.39	0.15	0.069	106.02
344	8.10	0.15	0.053	138.02	394	9.66	0.15	0.160	36.02
345	8.71	0.10	0.056	99.03	395	10.38	0.15	0.041	54.02
346	7.13	0.15	0.130	109.02	396	9.9	0.15	0.170	34.01
347	8.96	0.15	0.140	54.02	397	9.31	0.15	0.150	45.02
348	9.4	0.15	0.036	88.01	398	10.3	0.15	0.045	50.01
349	5.93	0.37	0.340	143.03	399	9.0	0.15	0.140	52.01
350	8.37	0.15	0.047	123.02	400	10.1	0.15	0.140	34.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
401	9.1	0.15	0.030	103.01	451	6.65	0.19	0.073	229.03
402	9.02	0.15	0.120	57.02	452	11.2	0.15	0.01	76.51
403	9.1	0.15	0.120	51.01	453	10.6	0.15	0.140	24.01
404	9.01	0.15	0.041	101.02	454	9.20	0.15	0.059	84.02
405	8.46	0.15	0.045	129.02	455	8.86	0.15	0.060	87.02
406	10.36	0.15	0.043	53.02	456	9.2	0.15	0.100	43.01
407	8.88	0.15	0.050	97.02	457	11.0	0.15	0.01	83.91
408	9.5	0.15	0.120	45.01	458	9.63	0.15	0.170	40.02
409	7.62	0.29	0.057	167.03	459	10.44	0.15	0.150	27.02
410	8.30	0.15	0.054	127.02	460	10.6	0.15	0.01	100.81
411	8.9	0.15	0.066	79.01	461	10.48	0.15	0.051	45.02
412	9.0	0.15	0.043	93.01	462	9.23	0.15	0.300	38.02
413	10.18	0.15	0.120	34.02	463	11.82	0.15	0.077	21.02
414	9.49	0.15	0.047	75.02	464	9.52	0.15	0.046	76.02
415	9.21	0.15	0.049	79.02	465	9.7	0.15	0.037	76.01
416	7.89	0.20	0.150	89.03	466	8.30	0.15	0.056	120.02
417	9.34	0.15	0.170	43.02	467	10.5	0.15	0.036	47.01
418	9.77	0.15	0.130	38.02	468	9.83	0.15	0.050	71.02
419	8.42	0.15	0.044	132.03	469	8.62	0.15	0.030	128.02
420	8.31	0.15	0.038	146.02	470	10.07	0.15	0.190	28.02
421	11.78	0.15	0.01	58.62	471	6.73	0.37	0.200	139.03
422	10.83	0.15	0.01	90.72	472	8.92	0.15	0.240	47.02
423	7.24	0.15	0.038	216.02	473	12.3	0.15	0.01	46.11
424	9.8	0.15	0.030	90.01	474	10.6	0.15	0.077	37.01
425	9.9	0.15	0.046	66.01	475	11.88	0.15	0.033	31.02
426	8.42	0.15	0.037	133.02	476	8.55	0.15	0.039	121.02
427	9.8	0.15	0.260	33.01	477	10.25	0.15	0.210	25.02
428	11.5	0.15	0.067	21.01	478	7.98	0.15	0.160	81.02
429	9.82	0.15	0.044	70.02	479	9.6	0.15	0.041	77.01
430	10.3	0.15	0.100	34.01	480	8.38	0.15	0.170	57.02
431	8.72	0.15	0.048	97.02	481	8.6	0.15	0.041	116.01
432	8.84	0.15	0.170	48.02	482	8.84	0.15	0.150	51.02
433	11.16	0.46	0.01	77.93	483	8.38	0.23	0.130	73.03
434	11.21	0.15	0.01	76.12	484	9.86	0.15	0.01	141.82
435	10.23	0.15	0.077	42.02	485	8.3	0.15	0.120	68.01
436	9.8	0.15	0.048	62.01	486	10.7	0.15	0.110	24.01
437	10.41	0.15	0.560	14.02	487	8.14	0.15	0.220	64.02
438	9.80	0.15	0.045	63.02	488	7.81	0.15	0.052	157.02
439	9.83	0.15	0.036	79.02	489	8.32	0.15	0.038	144.02
440	11.5	0.15	0.01	66.61	490	8.32	0.15	0.057	121.02
441	8.51	0.15	0.140	73.02	491	8.5	0.15	0.052	100.01
442	10.03	0.15	0.044	67.02	492	9.8	0.15	0.047	54.01
443	10.28	0.15	0.170	28.02	493	10.3	0.15	0.036	51.01
444	7.83	0.22	0.044	169.03	494	8.96	0.15	0.059	88.02
445	9.29	0.15	0.044	89.02	495	10.78	0.15	0.041	41.02
446	8.90	0.15	0.350	42.02	496	11.61	0.15	0.100	17.02
447	8.99	0.15	0.052	81.02	497	10.02	0.11	0.085	45.03
448	10.30	0.15	0.050	49.02	498	8.95	0.15	0.073	84.02
449	9.47	0.15	0.031	88.02	499	9.39	0.15	0.033	85.02
450	10.28	0.15	0.099	35.02	500	9.3	0.15	0.150	45.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
501	8.9	0.15	0.068	79.01	551	9.57	0.15	0.041	81.02
502	10.77	0.15	0.200	20.02	552	9.4	0.15	0.034	80.01
503	9.14	0.15	0.071	79.02	553	12.2	0.15	0.01	48.31
504	9.4	0.15	0.160	31.01	554	8.97	0.15	0.051	98.02
505	8.61	-.03	0.01	252.13	555	10.6	0.15	0.060	42.01
506	8.85	0.15	0.044	109.02	556	9.56	0.15	0.210	39.02
507	9.1	0.15	0.120	48.01	557	11.8	0.15	0.01	58.01
508	8.24	0.15	0.039	147.02	558	9.09	0.15	0.100	61.02
509	8.40	0.15	0.200	58.02	559	9.36	0.15	0.046	79.02
510	9.73	0.15	0.065	59.02	560	10.6	0.15	0.060	41.01
511	6.22	0.16	0.053	336.03	561	11.21	0.15	0.067	25.02
512	10.68	0.15	0.150	23.02	562	9.95	0.15	0.130	35.02
513	9.75	0.15	0.083	52.02	563	8.50	0.15	0.210	54.02
514	9.04	0.15	0.029	110.02	564	10.43	0.15	0.047	50.02
515	11.23	0.15	0.031	43.02	565	10.88	0.15	0.076	29.02
516	8.27	0.15	0.150	75.02	566	8.03	0.15	0.032	174.02
517	9.35	0.15	0.034	95.02	567	9.16	0.15	0.035	96.02
518	11.0	0.15	0.150	17.01	568	9.1	0.15	0.038	89.01
519	9.14	0.15	0.120	53.02	569	10.12	0.15	0.028	75.02
520	10.61	0.15	0.081	30.02	570	8.81	0.15	0.052	106.02
521	8.31	-.06	0.036	120.03	571	11.59	0.15	0.019	44.02
522	9.12	0.15	0.027	112.02	572	10.94	0.15	0.080	30.02
523	9.6	0.15	0.180	36.01	573	9.6	0.15	0.110	50.01
524	9.83	0.15	0.038	73.02	574	12.3	0.15	0.190	8.01
525	12.53	0.15	0.01	41.52	575	10.9	0.15	0.100	23.01
526	10.17	0.15	0.058	46.02	576	9.4	0.15	0.025	86.01
527	10.1	0.15	0.043	55.01	577	9.5	0.15	0.100	44.01
528	9.14	0.15	0.054	86.02	578	9.2	0.15	0.054	71.01
529	10.06	0.15	0.100	38.02	579	7.85	0.15	0.170	89.02
530	9.29	0.15	0.043	89.02	580	9.6	0.15	0.069	54.01
531	11.8	0.15	0.190	17.01	581	9.4	0.15	0.058	66.01
532	5.81	0.26	0.160	230.03	582	9.11	0.15	0.190	46.02
533	9.67	0.15	0.190	34.02	583	9.01	0.15	0.052	85.02
534	9.77	0.15	0.140	37.02	584	8.71	0.24	0.170	56.03
535	9.48	0.15	0.047	76.02	585	10.40	0.15	0.035	60.02
536	8.08	0.15	0.042	157.02	586	9.21	0.15	0.049	84.02
537	8.8	0.15	0.230	47.01	587	12.2	0.15	0.01	48.31
538	9.3	0.15	0.051	77.01	588	8.67	0.15	0.030	146.02
539	9.7	0.15	0.066	55.01	589	9.14	0.15	0.049	92.02
540	10.76	0.15	0.190	21.02	590	9.90	0.15	0.095	40.02
541	10.1	0.15	0.041	59.01	591	10.64	0.15	0.030	54.02
542	9.36	0.15	0.190	43.02	592	9.3	0.15	0.01	183.51
543	9.4	0.15	0.130	44.01	593	9.28	0.06	0.053	78.03
544	9.9	0.15	0.220	26.01	594	12.01	0.15	0.150	9.02
545	8.84	0.15	0.050	115.02	595	8.0	0.15	0.080	113.01
546	9.70	0.15	0.049	69.02	596	8.90	0.15	0.036	116.02
547	9.52	0.15	0.042	72.02	597	9.4	0.15	0.220	37.01
548	11.26	0.15	0.01	74.42	598	9.53	0.15	0.044	74.02
549	11.01	0.15	0.160	20.02	599	8.71	0.15	0.140	69.02
550	9.37	0.15	0.220	39.02	600	10.18	0.15	0.170	28.02

ID/1 No.	H	G	Input p.	Input D
601	9.65	0.15	0.042	75.02
602	8.31	0.15	0.045	129.02
603	12.1	0.15	0.049	15.01
604	9.2	0.15	0.075	65.01
605	9.3	0.15	0.058	71.01
606	10.38	0.15	0.076	39.02
607	9.5	0.15	0.050	65.01
608	10.6	0.15	0.01	100.81
609	10.0	0.15	0.054	56.01
610	12.1	0.15	0.01	50.51
611	9.19	0.15	0.091	58.02
612	11.2	0.15	0.036	40.01
613	9.67	0.15	0.031	81.02
614	11.0	0.15	0.089	28.01
615	10.36	0.15	0.051	49.02
616	10.68	0.15	0.150	23.02
617	8.19	0.15	0.043	149.02
618	8.26	0.15	0.058	124.02
619	9.95	0.15	0.01	136.02
620	11.28	0.15	0.01	73.72
621	10.49	0.15	0.100	31.02
622	10.17	0.15	0.01	122.92
623	10.97	0.15	0.037	45.02
624	7.49	0.15	0.01	422.32
625	10.0	0.15	0.120	31.01
626	9.00	0.15	0.041	104.02
627	9.95	0.15	0.062	51.02
628	9.25	0.15	0.140	51.02
629	9.9	0.15	0.01	139.21
630	11.0	0.15	0.130	20.01
631	8.70	0.15	0.120	60.02
632	11.6	0.15	0.01	63.61
633	9.73	0.15	0.120	38.02
634	9.6	0.15	0.040	68.01
635	9.01	0.15	0.042	99.02
636	9.5	0.15	0.039	78.01
637	11.0	0.15	0.037	43.01
638	9.8	0.15	0.048	67.01
639	8.20	0.15	0.140	74.02
640	8.99	0.15	0.063	84.02
641	12.1	0.15	0.01	50.51
642	9.98	0.15	0.100	39.02
643	9.72	0.15	0.036	75.02
644	11.13	0.15	0.140	23.02
645	9.94	0.15	0.170	32.02
646	12.5	0.15	0.01	42.01
647	11.41	0.15	0.01	69.42
648	9.68	0.15	0.046	70.02
649	12.4	0.15	0.01	44.01
650	12.93	0.15	0.01	34.52
651	10.01	0.15	0.120	36.02
652	11.4	0.15	0.092	22.01
653	9.18	0.15	0.170	43.02
654	8.52	0.15	0.043	132.02
655	9.6	0.15	0.110	37.01
656	10.0	0.15	0.075	57.01
657	10.93	0.15	0.040	43.02
658	10.54	0.15	0.150	26.02
659	8.99	0.15	0.040	115.02
660	9.14	0.15	0.150	44.02
661	9.63	0.15	0.091	51.02
662	10.5	0.15	0.150	27.01
663	9.21	0.15	0.033	104.02
664	9.97	0.15	0.01	134.82
665	8.1	0.15	0.210	56.01
666	10.9	0.15	0.095	29.01
667	8.9	0.15	0.057	83.01
668	11.8	0.15	0.032	27.01
669	10.24	0.15	0.100	36.02
670	9.8	0.15	0.240	36.01
671	10.0	0.15	0.031	63.01
672	11.1	0.15	0.040	34.01
673	10.20	0.15	0.089	39.02
674	7.42	0.15	0.180	101.02
675	7.91	0.15	0.01	348.02
676	9.3	0.15	0.042	82.01
677	9.7	0.15	0.250	29.01
678	9.02	0.15	0.300	43.02
679	9.02	0.15	0.01	208.72
680	9.31	0.15	0.040	86.02
681	11.0	0.15	0.01	83.91
682	12.2	0.15	0.082	15.01
683	8.72	0.15	0.050	116.02
684	10.84	0.15	0.01	90.32
685	11.8	0.15	0.200	13.01
686	9.67	0.15	0.110	44.02
687	11.71	0.15	0.01	60.52
688	10.59	0.15	0.057	43.02
689	12.15	0.15	0.100	15.02
690	7.76	0.15	0.078	139.02
691	9.30	0.15	0.037	92.02
692	9.18	0.15	0.180	47.02
693	9.38	0.15	0.076	68.02
694	9.17	0.15	0.051	92.02
695	9.30	0.15	0.160	51.02
696	9.0	0.15	0.052	79.01
697	9.63	0.15	0.037	82.02
698	10.7	0.15	0.01	96.31
699	11.72	0.15	0.01	60.22
700	11.2	0.15	0.160	17.01

ID/1 No.	H	G	Input p.	Input D
701	9.25	0.15	0.150	46.02
702	7.25	0.15	0.056	201.02
703	12.1	0.15	0.01	50.51
704	5.94	-.02	0.064	331.03
705	8.39	0.15	0.038	138.02
706	10.2	0.15	0.075	31.01
707	12.2	0.15	0.01	48.31
708	10.61	0.15	0.150	25.02
709	9.04	0.15	0.045	99.02
710	11.1	0.15	0.065	30.01
711	11.9	0.15	0.01	55.41
712	8.32	0.03	0.046	132.03
713	8.97	0.15	0.041	109.02
714	9.07	0.15	0.240	41.02
715	9.8	0.15	0.180	31.01
716	10.84	0.15	0.120	25.02
717	11.10	0.15	0.051	36.02
718	9.8	0.15	0.038	76.01
719	16	0.15	0.01	8.41
720	9.71	0.15	0.180	37.02
721	9.26	0.15	0.050	82.02
722	12.1	0.15	0.01	50.51
723	9.7	0.15	0.120	38.01
724	13.2	0.15	0.01	30.51
725	11.81	0.15	0.037	31.02
726	10.57	0.15	0.038	47.02
727	9.62	0.15	0.140	37.02
728	12.8	0.15	0.01	36.61
729	9.31	0.15	0.110	53.02
730	14.0	0.15	0.01	21.11
731	9.62	0.15	0.120	46.02
732	10.7	0.15	0.058	38.01
733	9.05	0.15	0.049	91.02
734	9.7	0.15	0.028	78.01
735	9.55	0.15	0.044	76.02
736	11.64	0.15	0.110	18.02
737	8.81	0.15	0.230	46.02
738	10.13	0.15	0.044	64.02
739	8.66	0.15	0.030	110.02
740	8.97	0.15	0.049	94.02
741	10.4	0.15	0.110	32.01
742	9.55	0.15	0.110	46.02
743	10.0	0.15	0.046	55.01
744	10.21	0.15	0.039	61.02
745	10.3	0.15	0.01	115.81
746	10.00	0.15	0.038	75.02
747	7.69	0.15	0.047	177.02
748	9.01	0.15	0.039	106.02
749	11.82	0.15	0.01	57.52
750	12.13	0.15	0.043	24.02
751	8.66	0.08	0.047	115.03
752	10.1	0.15	0.033	65.01
753	10.21	0.15	0.01	120.72
754	9.19	0.15	0.047	88.02
755	9.81	0.15	0.110	41.02
756	9.6	0.15	0.031	73.01
757	10.20	0.15	0.110	33.02
758	8.16	0.15	0.100	86.02
759	10.5	0.15	0.038	52.01
760	7.96	0.15	0.160	74.02
761	10.83	0.15	0.01	90.72
762	8.28	0.15	0.032	142.02
763	12.5	0.15	0.064	17.01
764	9.48	0.15	0.077	60.02
765	12.4	0.15	0.01	44.01
766	10.15	0.15	0.120	37.02
767	10.0	0.15	0.073	40.01
768	10.21	0.15	0.01	120.72
769	8.9	0.15	0.049	102.01
770	10.93	0.15	0.220	18.02
771	10.49	0.15	0.140	30.02
772	8.33	0.15	0.055	123.02
773	9.10	0.15	0.033	98.02
774	8.6	0.15	0.150	56.01
775	10.40	0.15	0.096	34.02
776	7.68	0.34	0.01	386.93
777	9.8	0.15	0.037	68.01
778	9.66	0.15	0.057	67.02
779	8.3	0.15	0.120	72.01
780	9.0	0.15	0.047	96.01
781	9.4	0.15	0.082	59.01
782	11.5	0.15	0.230	13.01
783	10.6	0.15	0.042	41.01
784	9.0	0.15	0.049	89.01
785	9.45	0.15	0.130	52.02
786	8.65	0.15	0.067	93.02
787	10.0	0.15	0.150	30.01
788	8.3	0.15	0.076	108.01
789	10.9	0.15	0.01	87.81
790	8.00	0.15	0.034	175.02
791	9.25	0.15	0.029	106.02
792	10.33	0.15	0.039	63.02
793	10.26	0.15	0.150	30.02
794	11.1	0.15	0.035	40.01
795	9.7	0.15	0.034	78.01
796	9.12	0.15	0.180	46.02
797	10.34	0.15	0.01	113.72
798	9.44	0.15	0.110	46.02
799	10.3	0.15	0.059	46.01
800	11.61	0.15	0.01	63.32

ID/1 No.	H	G	Input p.	Input D
801	11.55	0.15	0.039	35.02
802	12.6	0.15	0.01	40.11
803	9.6	0.15	0.087	51.01
804	7.84	0.18	0.049	160.03
805	9.82	0.15	0.043	72.02
806	10.6	0.15	0.020	65.01
807	10.56	0.15	0.100	31.02
808	9.7	0.15	0.210	34.01
809	11.8	0.15	0.01	58.01
810	12.7	0.15	0.01	38.31
811	10.78	0.15	0.140	23.02
812	11.5	0.15	0.01	66.61
813	11.7	0.15	0.084	16.01
814	8.75	0.15	0.031	115.02
815	10.7	0.15	0.130	24.01
816	10.0	0.15	0.036	62.01
817	10.8	0.15	0.130	25.01
818	9.1	0.15	0.110	52.01
819	11.9	0.15	0.01	55.41
820	10.3	0.15	0.033	61.01
821	11.84	0.15	0.01	57.02
822	12.18	0.15	0.01	48.72
823	11.2	0.15	0.110	20.01
824	10.41	0.15	0.089	35.02
825	11.50	0.15	0.210	12.02
826	11.3	0.15	0.085	21.01
827	13.2	0.15	0.01	30.51
828	10.33	0.15	0.044	55.02
829	10.7	0.15	0.034	43.01
830	9.10	0.15	0.140	47.02
831	12.8	0.15	0.01	36.61
832	11.18	0.15	0.01	77.22
833	11.3	0.15	0.01	73.01
834	9.39	0.15	0.068	69.02
835	11.3	0.15	0.037	41.01
836	13.6	0.15	0.01	25.31
837	11.8	0.15	0.01	58.01
838	10.09	0.15	0.039	63.02
839	10.2	0.15	0.170	22.01
840	9.6	0.15	0.340	29.01
841	12.92	0.15	0.01	34.62
842	10.8	0.15	0.054	43.01
843	13.6	0.15	0.01	25.31
844	9.4	0.15	0.055	66.01
845	9.7	0.15	0.035	57.01
846	10.26	0.15	0.039	54.02
847	10.29	0.15	0.130	32.02
848	10.9	0.15	0.01	87.81
849	8.10	0.15	0.01	318.92
850	9.6	0.15	0.038	84.01
851	11.62	0.15	0.170	14.02
852	10.09	0.15	0.250	24.02
853	11.67	0.15	0.048	27.02
854	12.1	0.15	0.01	50.51
855	11.8	0.15	0.01	58.01
856	10.69	0.15	0.037	52.02
857	11.32	0.15	0.170	16.02
858	10.0	0.15	0.280	23.01
859	9.6	0.15	0.032	77.01
860	10.26	0.15	0.110	32.02
861	9.6	0.15	0.039	69.01
862	10.6	0.15	0.180	29.01
863	9.02	0.15	0.390	31.02
864	12.87	0.15	0.01	35.42
865	11.9	0.15	0.059	20.01
866	9.2	0.15	0.036	91.01
867	11.3	0.15	0.087	28.01
868	10.22	0.15	0.050	54.02
869	12.4	0.15	0.057	20.01
870	12.1	0.15	0.01	50.51
871	12.1	0.15	0.100	12.01
872	9.91	0.15	0.160	33.02
873	11.49	0.15	0.044	33.02
874	10.0	0.15	0.064	58.01
875	11.5	0.15	0.150	14.01
876	10.89	0.15	0.110	25.02
877	10.71	0.15	0.047	39.02
878	16	0.15	0.01	8.41
879	11.2	0.15	0.01	76.51
880	11.46	0.15	0.036	35.02
881	11.6	0.15	0.01	63.61
882	10.5	0.15	0.042	48.01
883	12.59	0.15	0.01	40.32
884	8.81	0.15	0.01	229.92
885	10.7	0.15	0.060	36.01
886	8.7	0.15	0.079	93.01
887	13.76	-.12	0.01	23.53
888	9.51	0.15	0.130	44.02
889	11.1	0.15	0.080	22.01
890	10.78	0.15	0.095	29.02
891	9.9	0.15	0.050	53.01
892	9.8	0.15	0.048	78.01
893	9.47	0.15	0.036	78.02
894	9.8	0.15	0.120	40.01
895	8.3	0.15	0.029	146.01
896	11.8	0.15	0.160	14.01
897	10.37	0.15	0.210	23.02
898	12.0	0.15	0.01	52.91
899	10.14	0.15	0.160	30.02
900	11.74	0.15	0.057	22.02

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
901	11.35	0.15	0.01	71.42	951	11.46	0.15	0.150	15.02
902	12.3	0.15	0.01	46.11	952	9.2	0.15	0.055	84.01
903	9.8	0.15	0.056	65.01	953	10.3	0.15	0.120	31.01
904	9.9	0.15	0.036	62.01	954	9.94	0.15	0.052	59.02
905	11.59	0.15	0.076	21.02	955	11.1	0.15	0.120	18.01
906	9.5	0.15	0.01	167.31	956	12.6	0.15	0.01	40.11
907	9.76	0.15	0.057	65.02	957	9.7	0.15	0.034	76.01
908	10.69	0.15	0.099	28.02	958	10.71	0.15	0.031	53.02
909	8.95	0.15	0.037	120.02	959	10.2	0.15	0.026	59.01
910	10.3	0.15	0.054	52.01	960	12.9	0.15	0.01	35.01
911	7.89	0.15	0.041	174.02	961	11.3	0.15	0.032	39.01
912	8.4	0.15	0.053	86.01	962	11.52	0.15	0.026	39.02
913	11.9	0.15	0.01	55.41	963	12.49	0.15	0.120	11.02
914	8.76	0.15	0.084	78.02	964	10.9	0.15	0.01	87.81
915	11.7	0.15	0.01	60.81	965	9.8	0.15	0.048	54.01
916	11.2	0.15	0.032	36.01	966	9.91	0.15	0.230	27.02
917	11.0	0.15	0.047	30.01	967	12.1	0.15	0.076	14.01
918	10.7	0.15	0.130	24.01	968	10.01	0.15	0.170	31.02
919	11.3	0.15	0.055	30.01	969	12.57	0.15	0.038	20.02
920	11.19	0.15	0.082	26.02	970	12.5	0.15	0.01	42.01
921	10.6	0.15	0.047	60.01	971	10.05	0.15	0.043	66.02
922	11.7	0.15	0.01	60.81	972	9.5	0.15	0.045	78.01
923	11.5	0.15	0.037	33.01	973	9.6	0.15	0.067	54.01
924	9.37	0.15	0.040	87.02	974	10.30	0.15	0.190	24.02
925	8.33	0.15	0.230	56.02	975	10.41	0.15	0.01	110.12
926	10.3	0.15	0.043	50.01	976	9.22	0.15	0.043	86.02
927	9.54	0.15	0.068	69.02	977	9.67	0.15	0.050	66.02
928	9.4	0.15	0.033	69.01	978	9.73	0.15	0.034	82.02
929	12.1	0.15	0.01	50.51	979	9.8	0.15	0.100	40.01
930	11.4	0.15	0.032	39.01	980	7.85	0.06	0.170	88.03
931	9.26	0.15	0.120	52.02	981	10.57	0.15	0.083	31.02
932	10.00	0.15	0.01	132.92	982	9.9	0.15	0.01	139.21
933	11.8	0.15	0.024	25.01	983	9.58	0.15	0.043	77.02
934	10.3	0.15	0.040	57.01	984	9.03	0.15	0.310	33.02
935	12.9	0.15	0.110	8.01	985	12.7	0.15	0.01	38.31
936	10.0	0.15	0.084	44.01	986	9.4	0.15	0.100	52.01
937	11.83	0.15	0.049	27.02	987	9.3	0.15	0.140	44.01
938	10.8	0.15	0.072	27.01	988	11.2	0.15	0.064	28.01
939	12.14	0.15	0.083	17.02	989	11.8	0.15	0.110	14.01
940	9.55	0.15	0.01	163.52	990	11.5	0.15	0.097	20.01
941	11.55	0.15	0.01	65.12	991	11.12	0.15	0.043	34.02
942	10.3	0.15	0.110	32.01	992	10.8	0.15	0.082	30.01
943	9.77	0.15	0.044	71.02	993	11.8	0.15	0.01	58.01
944	10.51	-.10	0.01	105.13	994	10.30	0.15	0.180	27.02
945	10.13	0.15	0.180	29.02	995	10.3	0.15	0.110	32.01
946	10.42	0.15	0.044	49.02	996	10.88	0.15	0.060	34.02
947	9.8	0.15	0.190	27.01	997	12.0	0.15	0.056	23.01
948	11.3	0.15	0.01	73.01	998	11.9	0.15	0.057	35.01
949	9.7	0.15	0.051	70.01	999	11.1	0.15	0.180	21.01
950	11.6	0.15	0.170	17.01	1000	9.8	0.15	0.051	53.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1001	9.77	0.15	0.044	78.02	1051	9.9	0.15	0.042	68.01
1002	11.1	0.15	0.023	56.01	1052	11.97	0.15	0.01	53.72
1003	10.2	0.15	0.01	121.21	1053	12.4	0.15	0.01	44.01
1004	9.99	0.15	0.035	76.02	1054	10.3	0.15	0.045	49.01
1005	9.7	0.15	0.057	62.01	1055	12.0	0.15	0.01	52.91
1006	11.2	0.15	0.030	35.01	1056	11.7	0.15	0.01	60.81
1007	11.5	0.15	0.071	24.01	1057	10.96	0.15	0.027	49.02
1008	10.4	0.15	0.063	40.01	1058	11.98	0.15	0.130	14.02
1009	14.7	0.15	0.01	15.31	1059	10.7	0.15	0.01	96.31
1010	10.4	0.15	0.043	45.01	1060	12.7	0.15	0.01	38.31
1011	12.74	0.15	0.01	37.62	1061	12.09	0.15	0.01	50.82
1012	12.41	0.15	0.039	22.02	1062	9.85	0.15	0.01	142.42
1013	10.12	0.15	0.160	35.02	1063	11.38	0.15	0.140	17.02
1014	12.1	0.15	0.01	50.51	1064	10.5	0.15	0.150	19.01
1015	9.03	0.15	0.039	101.02	1065	13.2	0.15	0.01	30.51
1016	12.0	0.15	0.01	52.91	1066	12.5	0.15	0.01	42.01
1017	10.9	0.15	0.043	38.01	1067	10.99	0.15	0.01	84.32
1018	10.62	0.15	0.240	16.02	1068	10.54	0.15	0.140	26.02
1019	12.63	0.15	0.150	9.02	1069	9.3	0.15	0.130	43.01
1020	11.9	0.15	0.01	55.41	1070	10.6	0.15	0.048	39.01
1021	8.98	0.15	0.046	103.02	1071	10.1	0.15	0.058	52.01
1022	10.5	0.15	0.160	31.01	1072	10.5	0.15	0.037	46.01
1023	9.76	0.15	0.062	60.02	1073	11.9	0.15	0.01	55.41
1024	10.6	0.15	0.055	43.01	1074	10.0	0.15	0.052	53.01
1025	12.55	0.15	0.01	41.12	1075	10.15	0.15	0.089	40.02
1026	13.3	0.15	0.01	29.11	1076	12.30	0.15	0.029	24.02
1027	10.6	0.15	0.068	36.01	1077	12.2	0.15	0.01	48.31
1028	9.43	0.15	0.052	76.02	1078	11.80	0.15	0.01	58.02
1029	10.88	0.15	0.120	24.02	1079	11.20	0.15	0.099	23.02
1030	10.3	0.15	0.028	65.01	1080	12.20	0.15	0.027	27.02
1031	9.56	0.15	0.043	77.02	1081	11.3	0.15	0.024	40.01
1032	10.0	0.15	0.055	58.01	1082	10.41	0.15	0.055	47.02
1033	11.0	0.15	0.096	25.01	1083	12.0	0.15	0.01	52.91
1034	12.2	0.15	0.210	8.01	1084	10.78	0.15	0.091	31.02
1035	10.3	0.15	0.032	56.01	1085	9.4	0.15	0.044	72.01
1036	9.45	0.30	0.170	41.03	1086	9.3	0.15	0.054	70.01
1037	13.6	0.15	0.01	25.31	1087	9.73	0.15	0.120	40.02
1038	10.82	0.15	0.01	91.12	1088	11.39	0.15	0.01	70.12
1039	11.1	0.15	0.01	80.11	1089	11.6	0.15	0.170	14.01
1040	10.9	0.15	0.097	42.01	1090	12.49	0.15	0.01	42.22
1041	9.9	0.15	0.048	60.01	1091	10.6	0.15	0.067	36.01
1042	9.8	0.15	0.025	76.01	1092	10.82	0.15	0.044	47.02
1043	9.79	0.15	0.140	37.02	1093	8.83	0.15	0.036	120.02
1044	10.9	0.15	0.190	20.01	1094	11.9	0.15	0.083	18.01
1045	12.9	0.15	0.01	35.01	1095	10.42	0.15	0.110	29.02
1046	10.2	0.15	0.01	121.21	1096	10.3	0.15	0.069	46.01
1047	11.86	0.15	0.01	56.42	1097	11.7	0.15	0.057	25.01
1048	9.75	0.15	0.045	72.02	1098	10.2	0.15	0.120	28.01
1049	12.0	0.15	0.029	58.01	1099	10.4	0.15	0.130	35.01
1050	12.0	0.15	0.01	52.91	1100	11.0	0.15	0.01	83.91

ID/1 No.	H	G	Input p.	Input D
1101	10.1	0.15	0.047	40.01
1102	9.40	0.15	0.120	43.02
1103	12.25	0.15	0.01	47.22
1104	12.5	0.15	0.033	24.01
1105	10.09	0.15	0.081	42.02
1106	12.0	0.15	0.01	52.91
1107	9.1	0.15	0.070	80.01
1108	11.91	0.15	0.01	55.22
1109	10.06	0.15	0.035	69.02
1110	11.8	0.15	0.01	58.01
1111	10.67	0.15	0.01	97.62
1112	10.05	0.15	0.095	40.02
1113	9.4	0.15	0.130	44.01
1114	9.9	0.15	0.057	62.01
1115	9.3	0.15	0.066	71.01
1116	9.7	0.15	0.140	40.01
1117	11.9	0.15	0.01	55.41
1118	9.5	0.15	0.033	80.01
1119	11.2	0.15	0.022	44.01
1120	12.8	0.15	0.01	36.61
1121	11.8	0.15	0.01	58.01
1122	12.0	0.15	0.200	13.01
1123	11.7	0.15	0.01	60.81
1124	10.67	0.15	0.100	28.02
1125	11.2	0.15	0.01	76.51
1126	12.1	0.15	0.085	13.01
1127	10.95	0.15	0.030	50.02
1128	10.7	0.15	0.052	40.01
1129	10.20	0.15	0.110	38.02
1130	12.1	0.15	0.01	50.51
1131	13.0	0.15	0.01	33.41
1132	10.6	0.15	0.056	34.01
1133	12.22	0.15	0.01	47.82
1134	14.3	0.15	0.01	18.31
1135	10.2	0.15	0.047	51.01
1136	11.0	0.15	0.094	27.01
1137	10.74	0.15	0.089	26.02
1138	11.3	0.15	0.01	73.01
1139	12.51	0.15	0.01	41.82
1140	10.28	0.15	0.130	31.02
1141	13.9	0.15	0.056	11.01
1142	10.3	0.15	0.01	115.81
1143	7.93	0.15	0.041	134.02
1144	10.00	0.15	0.01	132.92
1145	11.1	0.15	0.098	25.01
1146	9.80	0.15	0.170	34.02
1147	12.0	0.15	0.01	52.91
1148	10.15	0.15	0.160	31.02
1149	10.57	0.15	0.041	57.02
1150	13.2	0.15	0.01	30.51
1151	12.7	0.15	0.012	21.01
1152	11.3	0.15	0.180	18.01
1153	12.1	0.15	0.01	50.51
1154	10.51	0.15	0.027	64.02
1155	11.5	0.15	0.140	15.01
1156	11.8	0.15	0.01	58.01
1157	10.0	0.15	0.01	132.91
1158	10.8	0.15	0.140	21.01
1159	11.55	0.15	0.044	30.02
1160	11.1	0.15	0.01	80.11
1161	11.6	0.15	0.040	39.01
1162	9.44	0.15	0.080	56.02
1163	10.6	0.15	0.082	34.01
1164	12.8	0.15	0.01	36.61
1165	10.3	0.15	0.032	54.01
1166	11.3	0.15	0.078	24.01
1167	9.85	0.15	0.039	68.02
1168	12.53	0.15	0.120	12.02
1169	13.0	0.15	0.01	33.41
1170	12.43	0.15	0.110	12.02
1171	9.90	0.15	0.038	73.02
1172	8.33	0.15	0.038	151.02
1173	8.89	0.15	0.026	134.02
1174	12.0	0.15	0.01	52.91
1175	10.2	0.15	0.01	121.21
1176	10.9	0.15	0.064	31.01
1177	9.30	0.15	0.039	95.02
1178	11.81	0.15	0.070	21.02
1179	12.9	0.15	0.01	35.01
1180	9.14	0.15	0.01	197.52
1181	11.5	0.15	0.01	66.61
1182	11.3	0.15	0.140	18.01
1183	12.1	0.15	0.068	20.01
1184	11.1	0.15	0.01	80.11
1185	12.09	0.15	0.01	50.82
1186	9.20	0.15	0.180	38.02
1187	11.3	0.15	0.037	37.01
1188	11.7	0.15	0.130	13.01
1189	10.0	0.15	0.053	58.01
1190	12.4	0.15	0.065	20.01
1191	11.3	0.15	0.052	45.01
1192	12.92	0.15	0.01	34.62
1193	12.2	0.15	0.01	48.31
1194	10.2	0.15	0.031	56.01
1195	13.7	0.15	0.01	24.21
1196	10.26	0.15	0.110	33.02
1197	10.17	0.15	0.064	49.02
1198	14.6	0.15	0.01	16.01
1199	10.36	0.15	0.089	35.02
1200	10.5	0.15	0.054	41.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1201	11.4	0.15	0.030	38.01	1251	10.50	0.15	0.01	105.62
1202	10.6	0.15	0.033	66.01	1252	10.89	0.15	0.01	88.22
1203	11.2	0.15	0.017	44.01	1253	11.5	0.15	0.027	30.01
1204	12.2	0.15	0.01	48.31	1254	10.8	0.15	0.031	49.01
1205	13.6	0.15	0.01	25.31	1255	10.2	0.15	0.100	34.01
1206	11.2	0.15	0.01	76.51	1256	9.66	0.15	0.039	77.02
1207	11.0	0.15	0.074	27.01	1257	12.19	0.15	0.01	48.52
1208	8.99	0.15	0.036	110.02	1258	10.5	0.15	0.048	47.01
1209	10.6	0.15	0.01	100.81	1259	11.0	0.15	0.063	36.01
1210	9.91	0.15	0.130	34.02	1260	11.9	0.15	0.01	55.41
1211	10.6	0.15	0.043	41.01	1261	11.0	0.15	0.077	34.01
1212	9.54	0.15	0.038	90.02	1262	10.25	0.15	0.043	58.02
1213	10.8	0.15	0.036	43.01	1263	10.50	0.15	0.044	50.02
1214	10.9	0.15	0.051	36.01	1264	9.1	0.15	0.037	77.01
1215	11.14	0.15	0.01	78.62	1265	11.0	0.15	0.01	83.91
1216	13.49	0.15	0.01	26.62	1266	9.41	0.15	0.060	75.02
1217	12.5	0.15	0.01	42.01	1267	12.1	0.15	0.030	26.01
1218	12.9	0.15	0.01	35.01	1268	9.12	0.15	0.040	97.02
1219	11.94	0.24	0.140	13.03	1269	8.82	0.15	0.047	109.02
1220	11.72	0.23	0.01	60.23	1270	12.5	0.15	0.150	9.01
1221	17.7	0.15	0.01	3.81	1271	10.6	0.15	0.045	49.01
1222	11.2	0.15	0.055	21.01	1272	12.8	0.15	0.01	36.61
1223	10.58	0.15	0.01	101.82	1273	12.8	0.15	0.011	30.01
1224	11.36	0.15	0.190	15.02	1274	11.82	0.15	0.01	57.52
1225	12.1	0.15	0.01	50.51	1275	10.72	0.15	0.084	32.02
1226	11.1	0.15	0.074	18.01	1276	10.4	0.15	0.068	36.01
1227	10.1	0.15	0.058	48.01	1277	11.05	0.15	0.070	29.02
1228	11.5	0.15	0.01	66.61	1278	10.8	0.15	0.01	92.01
1229	11.1	0.15	0.070	30.01	1279	12.51	0.15	0.01	41.82
1230	12.8	0.15	0.01	36.61	1280	10.33	0.15	0.044	55.02
1231	11.6	0.15	0.084	22.01	1281	11.6	0.15	0.01	63.61
1232	10.2	0.15	0.093	39.01	1282	10.0	0.15	0.053	55.01
1233	11.3	0.15	0.048	34.01	1283	10.3	0.15	0.093	29.01
1234	10.71	0.15	0.100	28.02	1284	10.24	0.15	0.088	40.02
1235	12.68	0.15	0.01	38.72	1285	10.6	0.15	0.068	45.01
1236	11.93	0.15	0.043	26.02	1286	10.88	0.15	0.083	33.02
1237	10.91	0.15	0.046	41.02	1287	11.07	0.15	0.090	27.02
1238	11.9	0.15	0.059	22.01	1288	11.41	0.15	0.034	39.02
1239	12.5	0.15	0.056	17.01	1289	10.73	0.15	0.01	95.02
1240	9.7	0.15	0.058	60.01	1290	12.5	0.15	0.01	42.01
1241	9.45	0.15	0.039	85.02	1291	10.33	0.15	0.01	114.22
1242	10.1	0.15	0.055	49.01	1292	11.3	0.15	0.01	73.01
1243	9.68	0.15	0.037	75.02	1293	12.0	0.15	0.059	8.01
1244	11.3	0.15	0.049	31.01	1294	10.2	0.15	0.074	38.01
1245	9.89	0.15	0.200	28.02	1295	10.6	0.15	0.040	51.01
1246	10.9	0.15	0.220	19.01	1296	10.9	0.15	0.061	26.01
1247	10.52	0.15	0.059	40.02	1297	10.8	0.15	0.012	65.01
1248	9.7	0.15	0.01	152.61	1298	10.7	0.15	0.034	47.01
1249	11.54	0.15	0.150	14.02	1299	11.8	0.15	0.01	58.01
1250	12.26	0.15	0.046	21.02	1300	10.9	0.15	0.061	32.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1301	10.8	0.15	0.150	24.01	1351	9.6	0.15	0.037	67.01
1302	10.6	0.15	0.01	100.81	1352	11.1	0.15	0.097	23.01
1303	9.0	0.15	0.041	88.01	1353	10.4	0.15	0.120	37.01
1304	9.1	0.15	0.160	47.01	1354	11.3	0.15	0.048	52.01
1305	10.65	0.15	0.130	29.02	1355	13.05	0.15	0.01	32.62
1306	9.71	0.15	0.052	69.02	1356	9.9	0.15	0.031	67.01
1307	12.25	0.15	0.01	47.22	1357	11.03	0.15	0.033	45.02
1308	10.8	0.15	0.043	44.01	1358	12.2	0.15	0.030	23.01
1309	10.2	0.15	0.039	59.01	1359	10.50	0.15	0.035	55.02
1310	11.45	0.15	0.01	68.22	1360	11.0	0.15	0.054	31.01
1311	12.2	0.15	0.01	48.31	1361	10.8	0.15	0.040	34.01
1312	10.8	0.15	0.047	38.01	1362	11.18	0.15	0.066	31.02
1313	11.8	0.15	0.01	58.01	1363	11.6	0.15	0.01	63.61
1314	12.68	0.15	0.071	14.02	1364	10.6	0.15	0.084	29.01
1315	9.8	0.15	0.043	65.01	1365	11.7	0.15	0.01	60.81
1316	13.3	0.15	0.01	29.11	1366	10.45	0.15	0.120	31.02
1317	9.91	0.15	0.01	138.52	1367	13.0	0.15	0.01	33.41
1318	11.9	0.15	0.120	14.01	1368	10.92	0.15	0.140	22.02
1319	11.1	0.15	0.01	80.11	1369	10.0	0.15	0.045	45.01
1320	10.4	0.15	0.041	45.01	1370	13.8	0.15	0.01	23.11
1321	10.28	0.15	0.100	36.02	1371	11.4	0.15	0.049	35.01
1322	12.16	0.15	0.01	49.22	1372	12.2	0.15	0.01	48.31
1323	9.9	0.15	0.038	60.01	1373	13	0.15	0.01	33.41
1324	13.4	0.15	0.01	27.81	1374	14.1	0.15	0.01	20.11
1325	11.9	0.15	0.160	12.01	1375	11.6	0.15	0.055	23.01
1326	10.92	0.15	0.01	87.02	1376	12.2	0.15	0.01	48.31
1327	12.1	0.15	0.021	33.01	1377	13.1	0.15	0.01	31.91
1328	10.31	0.15	0.036	59.02	1378	12.1	0.15	0.01	50.51
1329	10.90	0.15	0.110	27.02	1379	11.05	0.15	0.160	21.02
1330	10.17	0.15	0.044	57.02	1380	11.6	0.15	0.01	63.61
1331	10.14	0.15	0.094	36.02	1381	12.29	0.15	0.050	24.02
1332	10.2	0.15	0.059	49.01	1382	12.2	0.15	0.01	48.31
1333	11.4	0.15	0.01	69.81	1383	11.5	0.15	0.059	24.01
1334	10.0	0.15	0.210	28.01	1384	11.2	0.15	0.045	29.01
1335	13.8	0.15	0.01	23.11	1385	10.7	0.15	0.120	25.01
1336	10.66	0.15	0.110	25.02	1386	12.6	0.15	0.01	40.11
1337	11.06	0.15	0.042	41.02	1387	12.9	0.15	0.01	35.01
1338	12.7	0.15	0.01	38.31	1388	10.81	0.15	0.074	29.02
1339	10.81	0.15	0.100	27.02	1389	11.64	0.15	0.049	28.02
1340	11.1	0.15	0.060	29.01	1390	9.40	0.15	0.033	104.02
1341	10.58	0.15	0.100	30.02	1391	12.07	0.15	0.01	51.22
1342	11.35	0.15	0.110	20.02	1392	11.72	0.15	0.040	29.02
1343	11.1	0.15	0.059	28.01	1393	12.2	0.15	0.01	48.31
1344	12.8	0.15	0.01	36.61	1394	12.5	0.15	0.01	42.01
1345	9.73	0.15	0.036	79.02	1395	11.4	0.15	0.095	20.01
1346	11.25	0.15	0.230	15.02	1396	12.0	0.15	0.160	13.01
1347	11.6	0.15	0.028	35.01	1397	11.47	0.15	0.01	67.52
1348	11.4	0.15	0.01	69.81	1398	10.1	0.15	0.110	34.01
1349	10.2	0.15	0.01	121.21	1399	13.8	0.15	0.01	23.11
1350	10.78	0.15	0.140	26.02	1400	11.5	0.15	0.01	66.61

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1401	12.25	0.15	0.01	47.22	1451	12.1	0.15	0.01	50.51
1402	13.0	0.15	0.01	33.41	1452	12.0	0.15	0.01	52.91
1403	11.3	0.15	0.01	73.01	1453	12.69	0.15	0.01	38.52
1404	9.2	0.15	0.049	91.01	1454	12.8	0.15	0.01	36.61
1405	12.3	0.15	0.01	46.11	1455	13.6	0.15	0.01	25.31
1406	10.6	0.15	0.054	31.01	1456	10.93	0.15	0.036	45.02
1407	10.6	0.15	0.100	23.01	1457	10.6	0.15	0.01	100.81
1408	11.0	0.15	0.046	41.01	1458	11.5	0.15	0.110	18.01
1409	10.6	0.15	0.077	36.01	1459	10.6	0.15	0.079	33.01
1410	11.1	0.15	0.100	22.01	1460	13.1	0.15	0.01	31.91
1411	10.9	0.15	0.066	34.01	1461	10.01	0.15	0.110	38.02
1412	12.8	0.15	0.01	36.61	1462	10.8	0.15	0.072	31.01
1413	10.9	0.15	0.077	25.01	1463	10.6	0.15	0.028	51.01
1414	12.4	0.15	0.039	19.01	1464	11.0	0.15	0.082	27.01
1415	12.19	0.15	0.064	17.02	1465	11.6	0.15	0.01	63.61
1416	10.40	0.15	0.01	110.62	1466	11.9	0.15	0.022	23.01
1417	10.8	0.15	0.01	92.01	1467	8.57	0.15	0.054	111.02
1418	12.09	0.15	0.220	11.02	1468	13.6	0.15	0.022	17.01
1419	11.3	0.15	0.140	17.01	1469	9.6	0.15	0.060	60.01
1420	11.5	0.15	0.064	23.01	1470	11.0	0.15	0.039	40.01
1421	10.3	0.15	0.01	115.81	1471	10.7	0.15	0.050	33.01
1422	13.42	0.15	0.01	27.52	1472	12.7	0.15	0.01	38.31
1423	10.5	0.15	0.056	31.01	1473	11.8	0.15	0.052	19.01
1424	9.5	0.15	0.052	73.01	1474	12.66	0.15	0.01	39.02
1425	11.3	0.15	0.01	73.01	1475	12.8	0.15	0.01	36.61
1426	10.8	0.15	0.210	18.01	1476	12.9	0.15	0.01	35.01
1427	10.7	0.15	0.059	39.01	1477	11.59	0.15	0.042	30.02
1428	10.9	0.15	0.035	59.01	1478	12.63	0.15	0.01	39.62
1429	12.5	0.15	0.01	42.01	1479	11.95	0.15	0.01	54.22
1430	12.8	0.15	0.01	36.61	1480	13.1	0.15	0.01	31.91
1431	11.5	0.15	0.01	66.61	1481	10.34	0.15	0.085	36.02
1432	11.7	0.15	0.01	60.81	1482	11.04	0.15	0.01	82.32
1433	11.4	0.15	0.01	69.81	1483	11.5	0.15	0.01	66.61
1434	10.43	0.15	0.120	31.02	1484	10.8	0.15	0.029	46.01
1435	12.8	0.15	0.035	19.01	1485	11.4	0.15	0.072	26.01
1436	10.3	0.15	0.023	63.01	1486	13.0	0.15	0.01	33.41
1437	8.30	0.15	0.029	171.02	1487	10.6	0.15	0.085	35.01
1438	11.4	0.15	0.033	41.01	1488	10.8	0.15	0.01	92.01
1439	10.45	0.15	0.027	59.02	1489	11.6	0.15	0.046	31.01
1440	11.8	0.15	0.01	58.01	1490	12.0	0.15	0.058	20.01
1441	13.1	0.15	0.035	17.01	1491	11.3	0.15	0.061	27.01
1442	11.57	0.15	0.01	64.52	1492	12.8	0.15	0.051	14.01
1443	10.8	0.15	0.01	92.01	1493	11.99	0.15	0.069	26.02
1444	10.6	0.15	0.069	31.01	1494	12.7	0.15	0.01	38.31
1445	11.84	0.15	0.01	57.02	1495	11.6	0.15	0.01	63.61
1446	12.7	0.15	0.01	38.31	1496	12.3	0.15	0.01	46.11
1447	11.3	0.15	0.01	73.01	1497	11.9	0.15	0.01	55.41
1448	12.6	0.15	0.017	23.01	1498	11.7	0.15	0.01	60.81
1449	12.4	0.15	0.01	44.01	1499	11.2	0.15	0.036	36.01
1450	11.9	0.15	0.110	17.01	1500	13.06	0.15	0.01	32.52

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1501	12.1	0.15	0.120	12.01	1551	12.2	0.15	0.031	23.01
1502	11.6	0.15	0.033	34.01	1552	11.0	0.15	0.093	21.01
1503	10.6	0.15	0.180	23.01	1553	11.7	0.15	0.01	60.81
1504	11.88	0.15	0.110	16.02	1554	11.9	0.15	0.01	55.41
1505	11.0	0.15	0.086	23.01	1555	11.7	0.15	0.01	60.81
1506	11.7	0.15	0.01	60.81	1556	10.55	0.15	0.100	30.02
1507	12.9	0.15	0.01	35.01	1557	11.3	0.15	0.01	73.01
1508	12.03	0.15	0.01	52.22	1558	10.2	0.15	0.029	68.01
1509	12.64	0.15	0.095	12.02	1559	11.9	0.15	0.01	55.41
1510	11.2	0.15	0.067	26.01	1560	11.5	0.15	0.075	20.01
1511	12.7	0.15	0.020	23.01	1561	11.6	0.15	0.071	33.01
1512	9.62	0.15	0.032	89.02	1562	11.8	0.15	0.200	12.01
1513	13.33	0.15	0.01	28.72	1563	13.3	0.15	0.01	29.11
1514	12.6	0.15	0.01	40.11	1564	10.88	0.15	0.01	88.62
1515	12.6	0.15	0.01	40.11	1565	12.3	0.15	0.01	46.11
1516	12.3	0.15	0.046	24.01	1566	16.4	0.15	0.01	7.02
1517	11.1	0.15	0.046	38.01	1567	9.47	0.15	0.052	70.02
1518	12.3	0.15	0.01	46.11	1568	12.1	0.15	0.01	50.51
1519	11.4	0.15	0.065	29.01	1569	11.1	0.15	0.019	36.01
1520	10.0	0.15	0.039	56.01	1570	12.4	0.15	0.099	16.01
1521	11.5	0.15	0.01	66.61	1571	11.5	0.15	0.023	34.01
1522	12.43	0.15	0.01	43.42	1572	10.0	0.15	0.01	132.91
1523	12.3	0.15	0.01	46.11	1573	12.3	0.15	0.110	12.01
1524	10.8	0.15	0.043	45.01	1574	10.3	0.15	0.030	64.01
1525	12.4	0.15	0.096	13.01	1575	12.3	0.15	0.01	46.11
1526	13.6	0.15	0.01	25.31	1576	11.04	0.15	0.065	31.02
1527	12.2	0.15	0.01	48.31	1577	13.1	0.15	0.01	31.91
1528	12.4	0.15	0.01	44.01	1578	10.26	0.15	0.040	56.02
1529	10.05	0.15	0.01	129.92	1579	10.68	0.15	0.040	48.02
1530	13.1	0.15	0.01	31.91	1580	14.52	0.00	0.01	16.63
1531	12.2	0.15	0.01	48.31	1581	10.85	0.15	0.049	39.02
1532	11.50	0.15	0.085	28.02	1582	10.9	0.15	0.048	39.01
1533	10.82	0.15	0.072	32.02	1583	8.60	0.15	0.051	109.02
1534	11.7	0.15	0.053	24.01	1584	10.67	0.15	0.130	24.02
1535	10.7	0.15	0.044	28.01	1585	10.66	0.15	0.042	52.02
1536	13.7	0.15	0.01	24.21	1586	11.9	0.15	0.074	16.01
1537	11.9	0.15	0.120	15.01	1587	11.2	0.15	0.01	76.51
1538	14.1	0.15	0.01	20.11	1588	11.1	0.15	0.01	80.11
1539	10.6	0.15	0.01	100.81	1589	12.0	0.15	0.01	52.91
1540	10.8	0.15	0.042	47.01	1590	11.7	0.15	0.140	14.01
1541	11.2	0.15	0.100	22.01	1591	11.7	0.15	0.065	21.01
1542	10.3	0.15	0.049	50.01	1592	11.6	0.15	0.160	15.01
1543	12.1	0.15	0.01	50.51	1593	13.2	0.15	0.01	30.51
1544	11.7	0.15	0.052	24.01	1594	12.2	0.15	0.120	13.01
1545	11.8	0.15	0.085	21.01	1595	12.02	0.15	0.037	28.02
1546	10.6	0.15	0.01	100.81	1596	10.4	0.15	0.037	51.01
1547	10.75	0.15	0.01	94.12	1597	12.0	0.15	0.01	52.91
1548	11.5	0.15	0.043	29.01	1598	12.2	0.15	0.043	14.01
1549	11.7	0.15	0.130	11.01	1599	11.0	0.15	0.036	43.01
1550	11.8	0.15	0.01	58.01	1600	11.9	0.15	0.01	55.41

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1601	12.32	0.15	0.01	45.72	1651	12.1	0.15	0.01	50.51
1602	12.49	0.15	0.110	12.02	1652	13.2	0.15	0.01	30.51
1603	10.9	0.15	0.048	39.01	1653	11.4	0.15	0.01	69.81
1604	10.53	0.15	0.090	33.02	1654	10.8	0.15	0.078	30.01
1605	10.1	0.15	0.098	38.01	1655	11.04	0.15	0.01	82.32
1606	12.17	0.15	0.041	26.02	1656	12.4	0.15	0.110	9.01
1607	11.6	0.15	0.150	14.01	1657	12.84	0.15	0.140	9.02
1608	12.9	0.15	0.01	35.01	1658	11.52	0.15	0.01	66.02
1609	10.61	0.15	0.087	32.02	1659	10.1	0.15	0.160	31.01
1610	13.1	0.15	0.01	31.91	1660	11.9	0.15	0.033	18.01
1611	11.3	0.15	0.01	73.01	1661	13.3	0.15	0.058	14.01
1612	11.6	0.15	0.01	63.61	1662	11.3	0.15	0.01	73.01
1613	11.4	0.15	0.072	22.01	1663	12.2	0.15	0.034	13.01
1614	10.7	0.15	0.048	49.01	1664	12.1	0.15	0.018	29.01
1615	11.38	0.15	0.048	32.02	1665	11.85	0.15	0.01	56.72
1616	11.5	0.15	0.079	27.01	1666	12.7	0.15	0.01	38.31
1617	10.4	0.15	0.01	110.61	1667	12.1	0.15	0.01	50.51
1618	11.5	0.15	0.01	66.61	1668	12.2	0.15	0.01	48.31
1619	12.15	0.15	0.01	49.42	1669	10.97	0.15	0.051	41.02
1620	15.60	0.15	0.01	10.12	1670	11.38	0.15	0.072	28.02
1621	11.63	0.15	0.320	11.02	1671	12.0	0.15	0.01	52.91
1622	12.2	0.15	0.01	48.31	1672	11.1	0.15	0.01	80.11
1623	11.0	0.15	0.081	34.01	1673	11.6	0.15	0.01	63.61
1624	11.2	0.15	0.072	27.01	1674	11.06	0.15	0.076	29.02
1625	10.34	0.15	0.01	113.72	1675	11.9	0.15	0.150	13.01
1626	10.5	0.15	0.01	105.61	1676	12.7	0.15	0.070	12.01
1627	13.2	0.60	0.01	30.53	1677	11.9	0.15	0.01	55.41
1628	10.02	0.15	0.048	59.02	1678	10.9	0.15	0.038	45.01
1629	12.6	0.15	0.100	11.01	1679	10.6	0.15	0.01	100.81
1630	11.2	0.15	0.083	23.01	1680	11.2	0.15	0.190	16.01
1631	12.2	0.15	0.130	11.01	1681	11.56	0.15	0.083	22.02
1632	11.3	0.15	0.046	30.01	1682	12.9	0.15	0.01	35.01
1633	10.5	0.15	0.072	40.01	1683	11.6	0.15	0.01	63.61
1634	13.0	0.15	0.01	33.41	1684	10.8	0.15	0.093	29.01
1635	11.1	0.15	0.078	22.01	1685	14.23	0.15	0.030	12.02
1636	13.1	0.15	0.140	12.01	1686	10.9	0.15	0.063	36.01
1637	10.1	0.15	0.062	49.01	1687	10.25	0.15	0.084	42.02
1638	11.5	0.15	0.01	66.61	1688	12.5	0.15	0.01	42.01
1639	10.98	0.15	0.043	40.02	1689	11.82	0.15	0.01	57.52
1640	13.1	0.15	0.01	31.91	1690	10.9	0.15	0.071	36.01
1641	10.53	0.15	0.110	29.02	1691	10.95	0.15	0.044	40.02
1642	10.5	0.15	0.085	26.01	1692	11.1	0.15	0.037	38.01
1643	12.8	0.15	0.01	36.61	1693	10.97	0.15	0.044	39.02
1644	11.82	0.15	0.01	57.52	1694	11.46	0.15	0.01	67.92
1645	10.7	0.15	0.01	96.31	1695	12.4	0.15	0.069	21.01
1646	11.82	0.15	0.01	57.52	1696	12.9	0.15	0.01	35.01
1647	10.3	0.15	0.028	71.01	1697	12.6	0.15	0.01	40.11
1648	12.54	0.15	0.01	41.32	1698	11.2	0.15	0.01	76.51
1649	11.2	0.15	0.049	28.01	1699	12.5	0.15	0.01	42.01
1650	11.56	0.15	0.042	31.02	1700	12.47	0.15	0.032	23.02

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1701	10.3	0.15	0.130	29.01	1751	12.2	0.15	0.110	14.01
1702	11.03	0.15	0.050	36.02	1752	13.2	0.15	0.01	30.51
1703	12.4	0.15	0.086	10.01	1753	11.1	0.15	0.01	80.11
1704	13.3	0.15	0.01	29.11	1754	9.77	0.15	0.033	82.02
1705	12.8	0.15	0.071	11.01	1755	10.77	0.15	0.100	28.02
1706	12.8	0.15	0.01	36.61	1756	12.2	0.15	0.01	48.31
1707	12.54	0.15	0.01	41.32	1757	13.36	0.15	0.01	28.32
1708	11.8	0.15	0.036	33.01	1758	10.9	0.15	0.110	28.01
1709	12.75	0.15	0.01	37.52	1759	13.15	0.15	0.01	31.22
1710	13.3	0.15	0.01	29.11	1760	11.5	0.15	0.028	40.01
1711	11.01	0.15	0.01	83.52	1761	11.4	0.15	0.01	69.81
1712	9.8	0.15	0.044	66.01	1762	11.8	0.15	0.01	58.01
1713	13.3	0.15	0.01	29.11	1763	12.6	0.15	0.01	40.11
1714	11.9	0.15	0.100	19.01	1764	11.2	0.15	0.064	30.01
1715	12.1	0.15	0.042	24.01	1765	9.92	0.15	0.090	45.02
1716	11.4	0.15	0.035	29.01	1766	11.7	0.15	0.048	24.01
1717	12.9	0.15	0.01	35.01	1767	12.20	0.15	0.01	48.32
1718	13.5	0.15	0.01	26.51	1768	12.70	0.15	0.01	38.32
1719	11.3	0.15	0.100	21.01	1769	13.7	0.15	0.01	24.21
1720	13.2	0.15	0.01	30.51	1770	12.2	0.15	0.01	48.31
1721	10.8	0.15	0.052	44.01	1771	10.1	0.15	0.047	58.01
1722	12.30	0.15	0.025	26.02	1772	12.82	0.15	0.01	36.32
1723	10.06	0.15	0.130	35.02	1773	11.9	0.15	0.01	55.41
1724	11.30	0.15	0.037	38.02	1774	12.5	0.15	0.01	42.01
1725	10.9	0.15	0.01	87.81	1775	12.1	0.15	0.01	50.51
1726	12.1	0.15	0.034	30.01	1776	11.0	0.15	0.044	39.01
1727	12.7	0.15	0.01	38.31	1777	11.1	0.15	0.01	80.11
1728	11.1	0.15	0.01	80.11	1778	11.6	0.15	0.01	63.61
1729	12.5	0.15	0.01	42.01	1779	14.2	0.15	0.01	19.21
1730	11.5	0.15	0.01	66.61	1780	10.68	0.15	0.093	31.02
1731	10.0	0.15	0.061	56.01	1781	12.7	0.15	0.01	38.31
1732	11.1	0.15	0.140	24.01	1782	11.3	0.15	0.073	33.01
1733	13.0	0.15	0.01	33.41	1783	11.8	0.15	0.043	26.01
1734	11.7	0.15	0.048	30.01	1784	12.3	0.15	0.130	15.01
1735	9.4	0.15	0.058	65.01	1785	12.7	0.15	0.01	38.31
1736	12.2	0.15	0.026	30.01	1786	11.4	0.15	0.120	23.01
1737	10.8	0.15	0.100	26.01	1787	11.7	0.15	0.060	29.01
1738	12.3	0.15	0.01	46.11	1788	11.9	0.15	0.01	55.41
1739	12.9	0.15	0.090	8.01	1789	13.0	0.15	0.01	33.41
1740	13.24	0.15	0.01	29.92	1790	12.5	0.15	0.01	42.01
1741	11.2	0.15	0.064	26.01	1791	11.8	0.15	0.032	29.01
1742	11.82	0.15	0.01	57.52	1792	12.03	0.15	0.01	52.22
1743	12.48	0.15	0.050	20.02	1793	12.6	0.15	0.046	18.01
1744	13.6	0.15	0.027	14.01	1794	11.08	0.15	0.035	43.02
1745	12.0	0.15	0.01	52.91	1795	11.8	0.15	0.036	28.01
1746	9.95	0.15	0.01	136.02	1796	9.84	0.15	0.041	76.02
1747	13.35	0.15	0.110	8.02	1797	12.3	0.15	0.01	46.11
1748	10.65	0.15	0.01	98.52	1798	12.8	0.15	0.01	36.61
1749	9.2	0.15	0.012	115.01	1799	10.9	0.15	0.067	28.01
1750	13.15	0.15	0.01	31.22	1800	12.6	0.15	0.01	40.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1801	11.0	0.15	0.01	83.91	1851	12.3	0.15	0.065	20.01
1802	11.9	0.15	0.01	55.41	1852	11.1	0.15	0.01	80.11
1803	12.0	0.15	0.01	52.91	1853	10.5	0.15	0.170	25.01
1804	11.7	0.15	0.01	60.81	1854	12.3	0.15	0.01	46.11
1805	11.0	0.15	0.051	33.01	1855	12.5	0.15	0.01	42.01
1806	12.0	0.15	0.01	52.91	1856	12.6	0.15	0.01	40.11
1807	12.1	0.15	0.01	50.51	1857	12.3	0.15	0.01	46.11
1808	12.1	0.15	0.078	17.01	1858	11.5	0.15	0.01	66.61
1809	12.1	0.15	0.01	50.51	1859	10.2	0.15	0.034	48.01
1810	12.3	0.15	0.01	46.11	1860	11.7	0.15	0.01	60.81
1811	10.7	0.15	0.01	96.31	1861	11.8	0.15	0.01	58.01
1812	11.3	0.15	0.056	26.01	1862	16.25	0.09	0.01	7.53
1813	11.6	0.15	0.022	27.01	1863	15.54	0.15	0.01	10.42
1814	13.8	0.15	0.01	23.11	1864	14.85	0.15	0.01	14.22
1815	11.36	0.15	0.044	33.02	1865	16.84	0.15	0.01	5.72
1816	12.3	0.15	0.01	46.11	1866	13.0	0.15	0.01	33.41
1817	11.8	0.15	0.081	16.01	1867	8.61	0.15	0.037	131.02
1818	14.7	0.15	0.01	15.31	1868	9.3	0.15	0.01	183.51
1819	10.2	0.15	0.046	44.01	1869	11.0	0.15	0.01	83.91
1820	13.0	0.15	0.01	33.41	1870	11.5	0.15	0.01	66.61
1821	13.3	0.15	0.01	29.11	1871	11.0	0.15	0.01	83.91
1822	13.6	0.15	0.01	25.31	1872	11.2	0.15	0.01	76.51
1823	12.9	0.15	0.01	35.01	1873	10.5	0.15	0.024	64.01
1824	11.4	0.15	0.072	22.01	1874	11.0	0.15	0.01	83.91
1825	11.8	0.15	0.01	58.01	1875	12.4	0.15	0.01	44.01
1826	10.9	0.15	0.042	27.01	1876	14.7	0.15	0.01	15.31
1827	12.39	0.15	0.01	44.22	1877	10.7	0.15	0.021	50.01
1828	10.9	0.15	0.069	30.01	1878	11.5	0.15	0.070	21.01
1829	12.5	0.15	0.01	42.01	1879	12.5	0.15	0.01	42.01
1830	12.45	0.15	0.01	43.02	1880	12.1	0.15	0.036	26.01
1831	12.8	0.15	0.040	17.01	1881	11.1	0.15	0.072	31.01
1832	11.0	0.15	0.041	36.01	1882	11.1	0.15	0.120	23.01
1833	11.98	0.15	0.01	53.42	1883	13.1	0.15	0.01	31.91
1834	11.5	0.15	0.01	66.61	1884	11.7	0.15	0.059	12.01
1835	11.5	0.15	0.01	66.61	1885	13.7	0.15	0.01	24.21
1836	11.3	0.15	0.01	73.01	1886	11.9	0.15	0.094	20.01
1837	12.9	0.15	0.01	35.01	1887	11.3	0.15	0.01	73.01
1838	10.6	0.15	0.054	39.01	1888	11.7	0.15	0.01	60.81
1839	11.8	0.15	0.01	58.01	1889	10.8	0.15	0.068	36.01
1840	11.6	0.15	0.01	63.61	1890	10.8	0.15	0.060	31.01
1841	10.8	0.15	0.018	53.01	1891	12.0	0.15	0.100	18.01
1842	12.41	0.15	0.01	43.82	1892	12.10	0.15	0.01	50.52
1843	11.6	0.15	0.056	27.01	1893	11.9	0.15	0.110	21.01
1844	11.0	0.15	0.01	83.91	1894	11.9	0.15	0.01	55.41
1845	11.3	0.15	0.01	73.01	1895	11.8	0.15	0.048	20.01
1846	13.1	0.15	0.041	12.01	1896	14.0	0.15	0.01	21.11
1847	11.0	0.15	0.130	26.01	1897	13.4	0.15	0.01	27.81
1848	10.9	0.15	0.01	87.81	1898	11.9	0.15	0.01	55.41
1849	11.6	0.15	0.01	63.61	1899	13.3	0.15	0.01	29.11
1850	12.8	0.15	0.01	36.61	1900	12.2	0.15	0.01	48.31

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
1901	11.2	0.15	0.01	76.51	1951	14.7	0.15	0.026	4.01
1902	9.51	0.15	0.028	101.02	1952	10.32	0.15	0.062	40.02
1903	10.5	0.15	0.100	29.01	1953	11.8	0.15	0.01	58.01
1904	11.3	0.15	0.085	20.01	1954	11.3	0.15	0.01	73.01
1905	13.5	0.15	0.01	26.51	1955	11.9	0.15	0.01	55.41
1906	12.7	0.15	0.01	38.31	1956	11.9	0.15	0.01	55.41
1907	11.8	0.15	0.01	58.01	1957	11.36	0.15	0.01	71.12
1908	11.7	0.15	0.085	26.01	1958	10.7	0.15	0.039	42.01
1909	12.3	0.15	0.056	19.01	1959	12.9	0.15	0.01	35.01
1910	10.7	0.15	0.078	36.01	1960	11.93	0.15	0.038	28.02
1911	10.11	0.15	0.023	82.02	1961	10.6	0.15	0.019	55.01
1912	11.4	0.15	0.01	69.81	1962	11.9	0.15	0.01	55.41
1913	11.5	0.15	0.01	66.61	1963	10.91	0.15	0.036	46.02
1914	12.4	0.15	0.01	44.01	1964	13.2	0.15	0.01	30.51
1915	18.97	0.10	0.01	2.13	1965	11.9	0.15	0.01	55.41
1916	14.93	0.15	0.01	13.72	1966	13.5	0.15	0.01	26.51
1917	13.9	0.15	0.01	22.11	1967	12.3	0.15	0.01	46.11
1918	12.2	0.15	0.01	48.31	1968	11.5	0.15	0.01	66.61
1919	13.45	0.15	0.01	27.12	1969	11.6	0.15	0.066	25.01
1920	14.17	0.15	0.01	19.52	1970	12.0	0.15	0.029	28.01
1921	14.3	0.15	0.01	18.31	1971	12.1	0.15	0.01	50.51
1922	11.6	0.15	0.01	63.61	1972	13.38	0.21	0.01	28.03
1923	13.1	0.15	0.026	16.01	1973	11.6	0.15	0.01	63.61
1924	12.8	0.15	0.046	14.01	1974	11.9	0.15	0.039	26.01
1925	12.0	0.15	0.01	52.91	1975	11.9	0.15	0.01	55.41
1926	11.6	0.15	0.01	63.61	1976	13.5	0.15	0.01	26.51
1927	11.6	0.15	0.01	63.61	1977	11.4	0.15	0.014	60.01
1928	12.68	0.15	0.01	38.72	1978	13.0	0.15	0.01	33.41
1929	12.2	0.15	0.01	48.31	1979	13.5	0.15	0.01	26.51
1930	10.9	0.15	0.071	28.01	1980	13.92	0.15	0.024	13.02
1931	13.2	0.15	0.01	30.51	1981	15.0	0.15	0.01	13.31
1932	13.6	0.15	0.01	25.31	1982	12.5	0.15	0.01	42.01
1933	12.9	0.15	0.01	35.01	1983	12.6	0.15	0.01	40.11
1934	12.8	0.15	0.270	7.01	1984	11.1	0.15	0.038	39.01
1935	13.0	0.15	0.01	33.41	1985	10.8	0.15	0.038	39.01
1936	11.1	0.15	0.085	26.01	1986	11.8	0.15	0.011	49.01
1937	11.9	0.15	0.095	15.01	1987	11.4	0.15	0.110	16.01
1938	13.0	0.15	0.01	33.41	1988	13.6	0.15	0.011	23.01
1939	10.8	0.15	0.074	35.01	1989	12.1	0.15	0.01	50.51
1940	11.0	0.15	0.039	38.01	1990	13.14	0.15	0.01	31.32
1941	11.5	0.15	0.01	66.61	1991	12.9	0.15	0.01	35.01
1942	13.0	0.15	0.046	14.01	1992	12.8	0.15	0.01	36.61
1943	15.75	0.15	0.01	9.42	1993	11.3	0.15	0.01	73.01
1944	14.4	0.15	0.01	17.51	1994	11.6	0.15	0.035	25.01
1945	12.2	0.15	0.01	48.31	1995	12.8	0.15	0.01	36.61
1946	11.9	0.15	0.01	55.41	1996	12.1	0.15	0.01	50.51
1947	10.8	0.15	0.120	34.01	1997	13.4	0.15	0.110	8.01
1948	11.8	0.15	0.01	58.01	1998	12.2	0.15	0.01	48.31
1949	13.4	0.15	0.01	27.81	1999	10.6	0.15	0.065	37.01
1950	12.5	0.15	0.01	42.01	2000	11.25	0.15	0.01	74.72

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2001	12.85	0.15	0.01	35.82	2051	11.9	0.15	0.057	25.01
2002	12.1	0.15	0.068	18.01	2052	10.48	0.15	0.087	35.02
2003	11.7	0.15	0.01	60.81	2053	11.9	0.15	0.01	55.41
2004	12.6	0.15	0.01	40.11	2054	12.0	0.15	0.029	24.01
2005	12.2	0.15	0.01	48.31	2055	13.5	0.15	0.01	26.51
2006	12.6	0.15	0.01	40.11	2056	12.3	0.15	0.01	46.11
2007	11.8	0.15	0.057	25.01	2057	11.9	0.15	0.01	55.41
2008	10.3	0.15	0.058	52.01	2058	11.0	0.15	0.092	31.01
2009	10.8	0.15	0.043	40.01	2059	15.8	0.15	0.01	9.21
2010	11.62	0.15	0.01	63.02	2060	6.0	0.15	0.01	838.72
2011	12.9	0.15	0.01	35.01	2061	16.56	0.15	0.01	6.52
2012	13.2	0.15	0.01	30.51	2062	16.80	0.15	0.01	5.82
2013	12.6	0.15	0.01	40.11	2063	16.4	0.15	0.01	7.01
2014	11.7	0.15	0.01	60.81	2064	12.53	0.15	0.01	41.52
2015	11.7	0.15	0.01	60.81	2065	12.2	0.15	0.048	22.01
2016	11.4	0.15	0.094	24.01	2066	12.5	0.15	0.024	21.01
2017	12.78	0.15	0.01	36.92	2067	10.48	0.15	0.044	50.02
2018	14.5	0.15	0.01	16.71	2068	11.5	0.15	0.029	35.01
2019	11.9	0.15	0.077	17.01	2069	11.1	0.15	0.037	39.01
2020	11.4	0.15	0.068	25.01	2070	13.9	0.15	0.01	22.11
2021	13.3	0.15	0.01	29.11	2071	13.3	0.15	0.01	29.11
2022	12.0	0.15	0.035	26.01	2072	12.61	0.15	0.01	40.02
2023	11.6	0.15	0.01	63.61	2073	12.7	0.15	0.01	38.31
2024	12.9	0.15	0.01	35.01	2074	14.0	0.15	0.01	21.11
2025	10.5	0.15	0.046	44.01	2075	13.6	0.15	0.01	25.31
2026	12.8	0.15	0.01	36.61	2076	14.4	0.15	0.01	17.51
2027	11.0	0.15	0.01	83.91	2077	14.1	0.15	0.01	20.11
2028	14	0.15	0.01	21.11	2078	12.1	0.15	0.01	50.51
2029	13.5	0.15	0.01	26.51	2079	12.7	0.15	0.01	38.31
2030	13.5	0.15	0.01	26.51	2080	13.1	0.15	0.01	31.91
2031	13.0	0.15	0.01	33.41	2081	12.14	0.15	0.036	26.02
2032	11.9	0.15	0.023	41.01	2082	13.3	0.15	0.01	29.11
2033	13.2	0.15	0.01	30.51	2083	13.27	0.15	0.01	29.52
2034	12.9	0.15	0.01	35.01	2084	12.2	0.15	0.037	21.01
2035	12.61	0.15	0.01	40.02	2085	11.4	0.15	0.01	69.81
2036	12.7	0.15	0.01	38.31	2086	12.4	0.15	0.01	44.01
2037	13.5	0.15	0.01	26.51	2087	13.1	0.15	0.01	31.91
2038	12.3	0.15	0.01	46.11	2088	12.42	0.15	0.01	43.62
2039	12.8	0.15	0.019	27.01	2089	10.98	0.15	0.01	84.62
2040	11.1	0.15	0.031	34.01	2090	10.99	0.15	0.041	41.02
2041	12.2	0.15	0.01	48.31	2091	10.2	0.15	0.077	34.01
2042	12.8	0.15	0.01	36.61	2092	11.9	0.15	0.01	55.41
2043	10.8	0.15	0.029	49.01	2093	12.6	0.15	0.01	40.11
2044	13	0.15	0.140	7.01	2094	12.0	0.15	0.01	52.91
2045	12.2	0.15	0.01	48.31	2095	12.4	0.15	0.01	44.01
2046	11.5	0.15	0.094	27.01	2096	13.3	0.15	0.01	29.11
2047	13.9	0.15	0.01	22.11	2097	11.9	0.15	0.01	55.41
2048	13.50	0.15	0.01	26.52	2098	12.5	0.15	0.080	17.01
2049	14.9	0.15	0.01	13.91	2099	15.18	0.15	0.01	12.22
2050	12.68	0.15	0.01	38.72	2100	16.05	0.12	0.01	8.23

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2101	18.7	0.15	0.01	2.41	2151	11.1	0.15	0.220	20.01
2102	15.3	0.15	0.01	11.61	2152	10.5	0.15	0.024	48.01
2103	10.8	0.15	0.170	23.01	2153	11.9	0.15	0.090	20.01
2104	9.8	0.15	0.01	145.71	2154	12.7	0.15	0.035	21.01
2105	10.7	0.15	0.034	23.01	2155	12.6	0.15	0.022	29.01
2106	11.7	0.15	0.01	60.81	2156	12.69	0.15	0.029	22.02
2107	11.4	0.15	0.110	17.01	2157	11.4	0.15	0.01	69.81
2108	11.5	0.15	0.080	23.01	2158	11.8	0.15	0.01	58.01
2109	11.91	0.15	0.01	55.22	2159	12.07	0.15	0.01	51.22
2110	13.8	0.15	0.01	23.11	2160	12.1	0.15	0.01	50.51
2111	10.45	0.15	0.110	30.02	2161	12.4	0.15	0.01	44.01
2112	12.8	0.15	0.01	36.61	2162	13.0	0.15	0.01	33.41
2113	13.17	0.15	0.01	30.92	2163	11.7	0.15	0.01	60.81
2114	11.1	0.15	0.055	32.01	2164	11.8	0.15	0.01	58.01
2115	11.0	0.15	0.095	24.01	2165	11.0	0.15	0.01	83.91
2116	12.1	0.15	0.045	22.01	2166	14.3	0.15	0.01	18.31
2117	11.7	0.15	0.01	60.81	2167	12.1	0.15	0.01	50.51
2118	12.0	0.15	0.01	52.91	2168	12.8	0.15	0.01	36.61
2119	12.8	0.15	0.01	36.61	2169	12.0	0.15	0.064	19.01
2120	10.4	0.15	0.055	42.01	2170	13.9	0.15	0.01	22.11
2121	12.3	0.15	0.01	46.11	2171	13.6	0.15	0.01	25.31
2122	12.1	0.15	0.01	50.51	2172	12.1	0.15	0.01	50.51
2123	11.5	0.15	0.01	66.61	2173	11.4	0.15	0.01	69.81
2124	11.7	0.15	0.01	60.81	2174	11.6	0.15	0.01	63.61
2125	12.4	0.15	0.058	15.01	2175	14.2	0.15	0.01	19.21
2126	12.4	0.15	0.01	44.01	2176	12.3	0.15	0.01	46.11
2127	10.7	0.15	0.023	42.01	2177	11.3	0.15	0.01	73.01
2128	13.6	0.15	0.01	25.31	2178	13.4	0.15	0.01	27.81
2129	13.7	0.15	0.01	24.21	2179	11.5	0.15	0.069	23.01
2130	13.5	0.15	0.018	18.01	2180	11.0	0.15	0.01	83.91
2131	12.72	0.15	0.140	8.02	2181	12.1	0.15	0.01	50.51
2132	11.4	0.15	0.051	33.01	2182	11.3	0.15	0.060	31.01
2133	13.3	0.15	0.01	29.11	2183	11.5	0.15	0.035	37.01
2134	12.71	0.15	0.01	38.22	2184	11.5	0.15	0.100	29.01
2135	17.94	0.15	0.01	3.42	2185	11.3	0.15	0.120	20.01
2136	11.6	0.15	0.01	63.61	2186	12.3	0.15	0.01	46.11
2137	11.1	0.15	0.029	44.01	2187	13.0	0.15	0.01	33.41
2138	12.0	0.15	0.160	15.01	2188	11.9	0.15	0.01	55.41
2139	12.80	0.15	0.01	36.62	2189	12.3	0.15	0.01	46.11
2140	10.9	0.15	0.054	35.01	2190	13.56	0.15	0.020	18.02
2141	11.3	0.15	0.081	26.01	2191	11.3	0.15	0.120	21.01
2142	12.1	0.15	0.077	21.01	2192	11.3	0.15	0.062	30.01
2143	11.2	0.15	0.01	76.51	2193	10.3	0.15	0.027	51.01
2144	11.0	0.15	0.130	17.01	2194	12.6	0.15	0.01	40.11
2145	10.6	0.15	0.081	37.01	2195	12.6	0.15	0.01	40.11
2146	10.2	0.15	0.01	121.21	2196	10.25	0.15	0.036	62.02
2147	11.7	0.15	0.032	33.01	2197	11.2	0.15	0.076	26.01
2148	11.1	0.15	0.01	80.11	2198	14.3	0.15	0.01	18.31
2149	11.7	0.15	0.01	60.81	2199	13.1	0.15	0.01	31.91
2150	13.4	0.15	0.01	27.81	2200	13.4	0.15	0.01	27.81

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2201	15.25	0.15	0.330	1.02	2251	11.4	0.15	0.047	29.01
2202	16.8	0.15	0.01	5.81	2252	11.9	0.15	0.01	55.41
2203	11.5	0.15	0.01	66.61	2253	12.9	0.15	0.01	35.01
2204	11.6	0.15	0.018	27.01	2254	12.5	0.15	0.01	42.01
2205	11.8	0.15	0.01	58.01	2255	11.3	0.15	0.071	28.01
2206	11.3	0.15	0.01	73.01	2256	11.8	0.15	0.01	58.01
2207	8.89	0.15	0.058	92.02	2257	12.9	0.15	0.01	35.01
2208	10.96	0.15	0.036	45.02	2258	11.4	0.15	0.048	27.01
2209	10.9	0.15	0.150	19.01	2259	12.6	0.15	0.024	24.01
2210	14.3	0.15	0.01	18.31	2260	9.31	0.15	0.064	84.02
2211	13.9	0.15	0.01	22.11	2261	12.8	0.15	0.01	36.61
2212	13.87	0.15	0.01	22.42	2262	12.6	0.15	0.01	40.11
2213	13.7	0.15	0.01	24.21	2263	10.9	0.15	0.100	23.01
2214	12.0	0.15	0.045	28.01	2264	10.5	0.15	0.100	30.01
2215	11.9	0.15	0.130	17.01	2265	13.1	0.15	0.01	31.91
2216	10.8	0.15	0.120	21.01	2266	10.80	0.15	0.029	53.02
2217	10.8	0.15	0.066	29.01	2267	13.9	0.15	0.036	16.01
2218	11.2	0.15	0.037	31.01	2268	11.4	0.15	0.01	69.81
2219	10.7	0.15	0.046	45.01	2269	10.5	0.15	0.100	30.01
2220	10.9	0.15	0.01	87.81	2270	10.9	0.15	0.01	87.81
2221	12.8	0.15	0.01	36.61	2271	11.6	0.15	0.079	34.01
2222	11.4	0.15	0.073	28.01	2272	13.94	0.15	0.01	21.72
2223	9.41	0.15	0.027	105.02	2273	13.3	0.15	0.01	29.11
2224	11.7	0.15	0.01	60.81	2274	12.3	0.15	0.01	46.11
2225	12.1	0.15	0.01	50.51	2275	13.2	0.15	0.01	30.51
2226	11.6	0.15	0.01	63.61	2276	12.9	0.15	0.01	35.01
2227	13.8	0.15	0.01	23.11	2277	12.2	0.15	0.01	48.31
2228	10.9	0.15	0.036	29.01	2278	14.3	0.15	0.01	18.32
2229	13.1	0.15	0.01	31.91	2279	12.97	0.15	0.040	16.02
2230	12.3	0.15	0.01	46.11	2280	13.5	0.15	0.01	26.51
2231	12.4	0.15	0.01	44.01	2281	13.7	0.15	0.01	24.21
2232	12.0	0.15	0.01	52.91	2282	13.2	0.15	0.01	30.51
2233	12.7	0.15	0.01	38.31	2283	12.7	0.15	0.01	38.31
2234	12.5	0.15	0.01	42.01	2284	12.7	0.15	0.01	38.31
2235	10.7	0.15	0.019	54.01	2285	14.3	0.15	0.01	18.31
2236	12.3	0.15	0.01	46.11	2286	13.0	0.15	0.01	33.41
2237	11.3	0.15	0.100	23.01	2287	13.0	0.15	0.01	33.41
2238	11.9	0.15	0.078	21.01	2288	11.0	0.15	0.01	83.91
2239	11.5	0.15	0.025	43.01	2289	13.6	0.15	0.01	25.31
2240	11.8	0.15	0.048	27.01	2290	12.2	0.15	0.01	48.31
2241	8.64	0.15	0.040	122.02	2291	10.8	0.15	0.068	38.01
2242	13.8	0.15	0.01	23.11	2292	11.7	0.15	0.01	60.81
2243	12.8	0.15	0.01	36.61	2293	10.9	0.15	0.01	87.81
2244	11.9	0.15	0.026	29.01	2294	11.5	0.15	0.01	66.61
2245	11.3	0.15	0.052	33.01	2295	12.0	0.15	0.01	52.91
2246	10.56	0.15	0.034	52.02	2296	11.3	0.15	0.01	73.01
2247	13.9	0.15	0.01	22.11	2297	11.0	0.15	0.069	29.01
2248	11.2	0.15	0.074	30.01	2298	12.9	0.15	0.01	35.01
2249	11.0	0.15	0.023	45.01	2299	13.3	0.15	0.01	29.11
2250	11.5	0.15	0.01	66.61	2300	11.9	0.15	0.01	55.41

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2301	10.8	0.15	0.01	92.01	2351	12.8	0.15	0.01	36.61
2302	12.1	0.15	0.01	50.51	2352	11.1	0.15	0.01	80.11
2303	11.0	0.15	0.01	83.91	2353	11.8	0.15	0.01	58.01
2304	12.4	0.15	0.01	44.01	2354	11.8	0.15	0.01	58.01
2305	11.8	0.15	0.01	58.01	2355	11.4	0.15	0.110	22.01
2306	11.4	0.15	0.035	23.01	2356	10.8	0.15	0.039	49.01
2307	10.9	0.15	0.029	45.01	2357	8.94	0.15	0.042	103.02
2308	11.8	0.15	0.081	19.01	2358	11.0	0.15	0.01	83.91
2309	11.3	0.15	0.01	73.01	2359	12.9	0.15	0.01	35.01
2310	11.3	0.15	0.01	73.01	2360	12.4	0.15	0.01	44.01
2311	10.52	0.15	0.029	60.02	2361	11.7	0.15	0.01	60.81
2312	10.18	0.15	0.039	59.02	2362	13.7	0.15	0.01	24.21
2313	12.9	0.15	0.032	17.01	2363	9.11	0.15	0.066	91.02
2314	12.8	0.15	0.01	36.61	2364	10.7	0.15	0.170	22.01
2315	10.7	0.15	0.130	26.01	2365	11.7	0.15	0.01	60.81
2316	12.7	0.15	0.01	38.31	2366	13.8	0.15	0.01	23.11
2317	13.42	0.15	0.01	27.52	2367	13.2	0.15	0.01	30.51
2318	13.8	0.15	0.01	23.11	2368	15.21	0.15	0.01	12.12
2319	12.2	0.15	0.01	48.31	2369	11.8	0.15	0.01	58.01
2320	10.5	0.15	0.056	40.01	2370	12.6	0.15	0.440	18.01
2321	11.5	0.15	0.075	22.01	2371	12.5	0.15	0.01	42.01
2322	12.7	0.15	0.042	18.01	2372	11.6	0.15	0.061	24.01
2323	10.7	0.15	0.01	96.31	2373	12.5	0.15	0.01	42.01
2324	11.3	0.15	0.01	73.01	2374	11.5	0.15	0.01	66.61
2325	11.9	0.15	0.01	55.41	2375	10.61	0.15	0.01	100.42
2326	11.1	0.15	0.048	45.01	2376	10.9	0.15	0.052	40.01
2327	13.9	0.15	0.01	22.11	2377	12.0	0.15	0.01	52.91
2328	12.5	0.15	0.073	14.01	2378	10.7	0.15	0.072	37.01
2329	14.9	0.15	0.01	13.91	2379	10.90	0.15	0.071	32.02
2330	11.3	0.15	0.061	38.01	2380	13.2	0.15	0.01	30.51
2331	12.2	0.15	0.046	20.01	2381	11.4	0.15	0.300	13.01
2332	10.6	0.15	0.083	34.01	2382	11.4	0.15	0.01	69.81
2333	11.5	0.15	0.055	23.01	2383	13.4	0.15	0.01	27.81
2334	13.5	0.15	0.01	26.51	2384	12.2	0.15	0.01	48.31
2335	12.9	0.15	0.01	35.01	2385	13.2	0.15	0.01	30.51
2336	11.4	0.15	0.01	69.81	2386	12.2	0.15	0.150	15.01
2337	12.0	0.15	0.042	25.01	2387	11.3	0.15	0.01	73.01
2338	11.9	0.15	0.01	55.41	2388	12.9	0.15	0.01	35.01
2339	13.49	0.15	0.01	26.62	2389	12.9	0.15	0.01	35.01
2340	20.26	0.15	0.01	1.22	2390	12.2	0.15	0.01	48.31
2341	12.5	0.15	0.01	42.01	2391	12.4	0.15	0.01	44.01
2342	11.7	0.15	0.01	60.81	2392	13.2	0.15	0.01	30.51
2343	13.4	0.15	0.01	27.81	2393	10.5	0.15	0.039	50.01
2344	12.1	0.15	0.01	50.51	2394	11.6	0.15	0.014	55.01
2345	10.80	0.15	0.067	35.02	2395	12.6	0.15	0.01	40.11
2346	11.9	0.15	0.01	55.41	2396	11.6	0.15	0.01	63.61
2347	11.3	0.15	0.01	73.01	2397	10.9	0.15	0.01	87.81
2348	12.4	0.15	0.01	44.01	2398	13.6	0.15	0.01	25.31
2349	11.9	0.15	0.089	21.01	2399	13.2	0.15	0.01	30.51
2350	13.4	0.15	0.043	14.01	2400	11.9	0.15	0.01	55.41

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2401	12.2	0.15	0.01	48.31	2451	12.1	0.15	0.01	50.51
2402	13.2	0.15	0.01	30.51	2452	11.9	0.15	0.01	55.41
2403	12.5	0.15	0.01	42.01	2453	11.2	0.15	0.031	45.01
2404	11.4	0.15	0.01	69.81	2454	13.5	0.15	0.01	26.51
2405	12.09	0.15	0.030	29.02	2455	11.7	0.15	0.01	60.81
2406	13.5	0.15	0.01	26.51	2456	9.6	0.15	0.035	103.01
2407	10.77	0.15	0.01	93.22	2457	12.7	0.15	0.01	38.31
2408	12.5	0.15	0.023	25.01	2458	11.8	0.15	0.052	27.01
2409	13.2	0.15	0.01	30.51	2459	12.0	0.15	0.062	24.01
2410	13.0	0.15	0.01	33.41	2460	12.5	0.15	0.01	42.01
2411	12.75	0.15	0.01	37.52	2461	11.4	0.15	0.072	28.01
2412	12.0	0.15	0.01	52.91	2462	14.8	0.15	0.01	14.61
2413	10.8	0.15	0.130	26.01	2463	11.8	0.15	0.140	12.01
2414	10.91	0.15	0.068	33.01	2464	11.5	0.15	0.075	19.01
2415	12.0	0.15	0.01	52.91	2465	12.0	0.15	0.047	22.01
2416	11.4	0.15	0.090	27.01	2466	12.1	0.15	0.038	24.01
2417	11.8	0.15	0.01	58.01	2467	13.0	0.15	0.01	33.41
2418	12.5	0.15	0.01	42.01	2468	12.4	0.15	0.160	9.01
2419	13.6	0.15	0.01	25.31	2469	11.6	0.15	0.01	63.61
2420	12.2	0.15	0.01	48.31	2470	12.0	0.15	0.01	52.91
2421	10.8	0.15	0.044	43.01	2471	11.9	0.15	0.01	55.41
2422	13.7	0.15	0.01	24.21	2472	13.1	0.15	0.01	31.91
2423	13.2	0.15	0.01	30.51	2473	13.2	0.15	0.01	30.51
2424	12.9	0.15	0.01	35.01	2474	11.8	0.15	0.082	21.01
2425	11.1	0.15	0.01	80.11	2475	11.2	0.15	0.01	76.51
2426	11.4	0.15	0.053	28.01	2476	10.9	0.15	0.110	24.01
2427	12.8	0.15	0.01	36.61	2477	12.4	0.15	0.01	44.01
2428	11.0	0.15	0.061	30.01	2478	12.8	0.15	0.01	36.61
2429	12.2	0.15	0.01	48.31	2479	13.1	0.15	0.037	19.01
2430	12.24	0.15	0.01	47.42	2480	12.8	0.15	0.01	36.61
2431	12.8	0.15	0.01	36.61	2481	13.8	0.15	0.01	23.11
2432	12.8	0.15	0.100	10.01	2482	12.7	0.15	0.01	38.31
2433	11.8	0.15	0.01	58.01	2483	10.8	0.15	0.021	53.01
2434	11.1	0.15	0.01	80.11	2484	13.0	0.15	0.060	12.01
2435	14.9	0.15	0.01	13.91	2485	12.8	0.15	0.01	36.61
2436	12.1	0.15	0.01	50.51	2486	12.4	0.15	0.01	44.01
2437	13.1	0.15	0.01	31.91	2487	13.2	0.15	0.01	30.51
2438	12.9	0.15	0.01	35.01	2488	13.9	0.15	0.01	22.11
2439	11.5	0.15	0.100	23.01	2489	12.0	0.15	0.01	52.91
2440	13.1	0.15	0.01	31.91	2490	11.9	0.15	0.120	13.01
2441	13.9	0.15	0.065	11.01	2491	13.68	0.15	0.01	24.42
2442	12.8	0.15	0.01	36.61	2492	11.3	0.15	0.086	26.01
2443	10.2	0.15	0.092	35.01	2493	12.5	0.15	0.01	42.01
2444	11.8	0.15	0.01	58.01	2494	10.6	0.15	0.028	57.01
2445	12.9	0.15	0.01	35.01	2495	15.5	0.15	0.01	10.61
2446	12.9	0.15	0.01	35.01	2496	13.5	0.15	0.01	26.51
2447	13.0	0.15	0.01	33.41	2497	12.9	0.15	0.01	35.01
2448	10.4	0.15	0.073	33.01	2498	12.0	0.15	0.01	52.91
2449	14.26	0.15	0.01	18.72	2499	12.1	0.15	0.01	50.51
2450	11.3	0.15	0.035	34.01	2500	12.8	0.15	0.01	36.61

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2501	12.08	0.15	0.01	51.02	2551	12.1	0.15	0.01	50.51
2502	11.7	0.15	0.110	18.01	2552	14.6	0.15	0.01	16.01
2503	13.9	0.15	0.01	22.11	2553	11.3	0.15	0.01	73.01
2504	12.1	0.15	0.01	50.51	2554	13.0	0.15	0.01	33.41
2505	11.3	0.15	0.01	73.01	2555	11.9	0.15	0.01	55.41
2506	11.9	0.15	0.01	55.41	2556	13.4	0.15	0.01	27.81
2507	11.7	0.15	0.01	60.81	2557	12.5	0.15	0.01	42.01
2508	13.5	0.15	0.01	26.51	2558	13.3	0.15	0.01	29.11
2509	12.6	0.15	0.01	40.11	2559	12.4	0.15	0.025	30.01
2510	12.60	0.15	0.01	40.12	2560	11.7	0.15	0.01	60.81
2511	12.5	0.15	0.041	17.01	2561	13.3	0.15	0.01	29.11
2512	12.7	0.15	0.01	38.31	2562	11.3	0.15	0.170	24.01
2513	13.4	0.15	0.01	27.81	2563	11.3	0.15	0.041	33.01
2514	12.9	0.15	0.019	24.01	2564	13.3	0.15	0.01	29.11
2515	12.6	0.15	0.01	40.11	2565	14.5	0.15	0.01	16.71
2516	13.7	0.15	0.01	24.21	2566	12.6	0.15	0.01	40.11
2517	11.7	0.15	0.016	47.01	2567	11.8	0.15	0.058	24.01
2518	13.4	0.15	0.01	27.81	2568	13.1	0.15	0.01	31.91
2519	11.3	0.15	0.01	73.01	2569	11.2	0.15	0.047	32.01
2520	12.0	0.15	0.01	52.91	2570	12.2	0.15	0.026	29.01
2521	11.7	0.15	0.01	60.81	2571	13.0	0.15	0.01	33.41
2522	11.6	0.15	0.01	63.61	2572	13.4	0.15	0.01	27.81
2523	11.5	0.15	0.073	23.01	2573	11.4	0.15	0.01	69.81
2524	10.9	0.15	0.048	36.01	2574	11.3	0.15	0.01	73.01
2525	10.5	0.15	0.01	105.61	2575	12.6	0.15	0.026	18.01
2526	11.9	0.15	0.01	55.41	2576	11.3	0.15	0.01	73.01
2527	13.0	0.15	0.01	33.41	2577	13.18	0.15	0.01	30.72
2528	12.6	0.15	0.01	40.11	2578	11.4	0.15	0.01	69.81
2529	12.7	0.15	0.01	38.31	2579	13.0	0.15	0.01	33.41
2530	11.7	0.15	0.01	60.81	2580	13.3	0.15	0.01	29.11
2531	10.9	0.15	0.100	25.01	2581	13.3	0.15	0.01	29.11
2532	12.7	0.15	0.01	38.31	2582	10.5	0.15	0.064	37.01
2533	11.7	0.15	0.01	60.81	2583	13.0	0.15	0.028	18.01
2534	10.9	0.15	0.081	34.01	2584	13.3	0.15	0.043	11.01
2535	12.5	0.15	0.01	42.01	2585	12.5	0.15	0.01	42.01
2536	13.0	0.15	0.01	33.41	2586	12.9	0.15	0.01	35.01
2537	12.7	0.15	0.01	38.31	2587	11.2	0.15	0.01	76.51
2538	13.7	0.15	0.01	24.21	2588	13.2	0.15	0.01	30.51
2539	14.3	0.15	0.01	18.31	2589	12.4	0.15	0.01	44.01
2540	13.1	0.15	0.01	31.91	2590	12.7	0.15	0.01	38.31
2541	12.1	0.15	0.01	50.51	2591	11.4	0.15	0.01	69.81
2542	11.4	0.15	0.040	33.01	2592	11.6	0.15	0.01	63.61
2543	11.7	0.15	0.01	60.81	2593	14.3	0.15	0.01	18.31
2544	13.0	0.15	0.140	10.01	2594	11.5	0.15	0.01	66.61
2545	13.0	0.15	0.01	33.41	2595	12.2	0.15	0.014	38.01
2546	12.0	0.15	0.070	18.01	2596	12.8	0.15	0.01	36.61
2547	14.0	0.15	0.01	21.11	2597	11.9	0.15	0.01	55.41
2548	12.8	0.15	0.01	36.61	2598	12.6	0.15	0.01	40.11
2549	12.7	0.15	0.01	38.31	2599	11.2	0.15	0.01	76.51
2550	11.2	0.15	0.01	76.51	2600	11.4	0.15	0.01	69.81

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2601	11.2	0.15	0.100	22.01	2651	12.3	0.15	0.01	46.11
2602	13.0	0.15	0.01	33.41	2652	14.1	0.15	0.01	20.11
2603	12.2	0.15	0.01	48.31	2653	12.1	0.15	0.055	20.01
2604	12.9	0.15	0.045	18.01	2654	12.5	0.15	0.043	23.01
2605	12.7	0.15	0.01	38.31	2655	11.2	0.15	0.032	40.01
2606	11.3	0.15	0.01	73.01	2656	13.5	0.15	0.01	26.51
2607	13.4	0.15	0.01	27.81	2657	11.6	0.15	0.01	63.61
2608	17.52	0.15	0.01	4.22	2658	12.4	0.15	0.01	44.01
2609	13.3	0.15	0.01	29.11	2659	11.2	0.15	0.063	31.01
2610	13.3	0.15	0.01	29.11	2660	12.1	0.15	0.140	13.01
2611	12.2	0.15	0.01	48.31	2661	11.3	0.15	0.01	73.01
2612	10.8	0.15	0.01	92.01	2662	14.4	0.15	0.052	10.01
2613	11.2	0.15	0.01	76.51	2663	14.0	0.15	0.01	21.11
2614	13.3	0.15	0.01	29.11	2664	13.8	0.15	0.034	13.01
2615	12.2	0.15	0.01	48.31	2665	13.2	0.15	0.01	30.51
2616	12.5	0.15	0.230	8.01	2666	11.7	0.15	0.024	39.01
2617	10.4	0.15	0.027	59.01	2667	12.2	0.15	0.029	28.01
2618	12.0	0.15	0.022	32.01	2668	13.3	0.15	0.01	29.11
2619	12.8	0.15	0.01	36.61	2669	12.6	0.15	0.01	40.11
2620	12.7	0.15	0.01	38.31	2670	10.5	0.15	0.01	105.61
2621	10.7	0.15	0.035	50.01	2671	13.4	0.15	0.01	27.81
2622	11.7	0.15	0.01	60.81	2672	11.7	0.15	0.044	21.01
2623	13.1	0.15	0.01	31.91	2673	12.5	0.15	0.01	42.01
2624	10.7	0.15	0.01	96.31	2674	9.38	0.15	0.041	101.02
2625	13.1	0.15	0.01	31.91	2675	12.5	0.15	0.01	42.01
2626	11.7	0.15	0.01	60.81	2676	12.8	0.15	0.01	36.61
2627	12.0	0.15	0.01	52.91	2677	11.6	0.15	0.062	22.01
2628	12.7	0.15	0.01	38.31	2678	12.4	0.15	0.01	44.01
2629	14.5	0.15	0.01	16.71	2679	11.9	0.15	0.01	55.41
2630	11.8	0.15	0.01	58.01	2680	13.5	0.15	0.01	26.51
2631	12.0	0.15	0.029	34.01	2681	12.3	0.15	0.01	46.11
2632	11.4	0.15	0.054	32.01	2682	13.8	0.15	0.01	23.11
2633	13.1	0.15	0.01	31.91	2683	11.8	0.15	0.01	58.01
2634	10.2	0.15	0.058	46.01	2684	11.6	0.15	0.01	63.61
2635	12.9	0.15	0.01	35.01	2685	12.2	0.15	0.01	48.31
2636	11.0	0.15	0.01	83.91	2686	11.6	0.15	0.01	63.61
2637	13.2	0.15	0.024	19.01	2687	11.89	0.15	0.01	55.72
2638	12.1	0.15	0.01	50.51	2688	11.6	0.15	0.069	21.01
2639	12.9	0.15	0.01	35.01	2689	13.9	0.15	0.01	22.11
2640	13.0	0.15	0.01	33.41	2690	11.1	0.15	0.200	21.01
2641	12.7	0.15	0.01	38.31	2691	13.4	0.15	0.01	27.81
2642	12.7	0.15	0.01	38.31	2692	12.3	0.15	0.01	46.11
2643	15.0	0.15	0.01	13.31	2693	13.3	0.15	0.01	29.11
2644	13.8	0.15	0.01	23.11	2694	13.8	0.15	0.01	23.11
2645	12.3	0.15	0.075	17.01	2695	12.3	0.15	0.01	46.11
2646	11.6	0.15	0.073	28.01	2696	12.0	0.15	0.01	52.91
2647	12.5	0.15	0.01	42.01	2697	10.2	0.15	0.034	53.01
2648	12.9	0.15	0.01	35.01	2698	11.9	0.15	0.01	55.41
2649	11.8	0.15	0.031	33.01	2699	11.7	0.15	0.01	60.81
2650	11.5	0.15	0.01	66.61	2700	12.1	0.15	0.01	50.51

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2701	12.5	0.15	0.01	42.01	2751	12.7	0.15	0.037	19.01
2702	11.0	0.15	0.01	83.91	2752	11.4	0.15	0.01	69.81
2703	13.5	0.15	0.01	26.51	2753	12.3	0.15	0.079	20.01
2704	13.2	0.15	0.01	30.51	2754	13.5	0.15	0.01	26.51
2705	13.6	0.15	0.062	9.01	2755	11.7	0.15	0.01	60.81
2706	11.9	0.15	0.01	55.41	2756	13.0	0.15	0.01	33.41
2707	11.6	0.15	0.046	29.01	2757	11.3	0.15	0.01	73.01
2708	11.8	0.15	0.01	58.01	2758	13.7	0.15	0.01	24.21
2709	13.3	0.15	0.018	20.01	2759	9.8	0.15	0.041	73.01
2710	13.5	0.15	0.01	26.51	2760	10.04	0.15	0.043	62.02
2711	11.5	0.15	0.01	66.61	2761	12.1	0.15	0.025	32.01
2712	14.3	0.15	0.01	18.31	2762	13.2	0.15	0.01	30.51
2713	11.5	0.15	0.01	66.61	2763	12.6	0.15	0.01	40.11
2714	13.4	0.15	0.01	27.81	2764	13.6	0.15	0.01	25.31
2715	11.9	0.15	0.098	15.01	2765	11.8	0.15	0.017	46.01
2716	13.3	0.15	0.01	29.11	2766	13.0	0.15	0.01	33.41
2717	12.6	0.15	0.01	40.11	2767	11.6	0.15	0.01	63.61
2718	11.7	0.15	0.043	29.01	2768	12.3	0.15	0.01	46.11
2719	13.5	0.15	0.01	26.51	2769	12.1	0.15	0.01	50.51
2720	13.9	0.15	0.042	9.01	2770	13.0	0.15	0.01	33.41
2721	12.0	0.15	0.01	52.91	2771	12.0	0.15	0.01	52.91
2722	12.1	0.15	0.01	50.51	2772	13.4	0.15	0.01	27.81
2723	12.5	0.15	0.01	42.01	2773	13.3	0.15	0.01	29.11
2724	11.7	0.15	0.022	30.01	2774	11.1	0.15	0.043	39.01
2725	10.4	0.15	0.053	41.01	2775	13.6	0.15	0.01	25.31
2726	12.5	0.15	0.020	34.01	2776	12.5	0.15	0.01	42.01
2727	12.3	0.15	0.01	46.11	2777	13.1	0.15	0.01	31.91
2728	12.4	0.15	0.048	18.01	2778	13.0	0.15	0.01	33.41
2729	11.4	0.15	0.083	21.01	2779	13.3	0.15	0.01	29.11
2730	11.6	0.15	0.01	63.61	2780	13.3	0.15	0.01	29.11
2731	10.7	0.15	0.029	51.01	2781	11.7	0.15	0.01	60.81
2732	12.1	0.15	0.01	50.51	2782	13.6	0.15	0.013	26.01
2733	13.2	0.15	0.01	30.51	2783	13.2	0.15	0.01	30.51
2734	11.4	0.15	0.081	26.01	2784	13.4	0.15	0.01	27.81
2735	14.32	0.15	0.01	18.22	2785	12.2	0.15	0.01	48.31
2736	12.8	0.15	0.01	36.61	2786	12.0	0.15	0.01	52.91
2737	11.9	0.15	0.01	55.41	2787	11.3	0.15	0.01	73.01
2738	12.2	0.15	0.01	48.31	2788	13.3	0.15	0.01	29.11
2739	13.2	0.15	0.090	13.01	2789	13.6	0.15	0.01	25.31
2740	11.7	0.15	0.087	25.01	2790	12.8	0.15	0.01	36.61
2741	12.0	0.15	0.01	52.91	2791	12.24	0.15	0.01	47.42
2742	12.1	0.15	0.062	21.01	2792	13.3	0.15	0.01	29.11
2743	12.6	0.15	0.01	40.11	2793	10.8	0.15	0.087	32.01
2744	14.78	0.15	0.01	14.72	2794	12.7	0.15	0.01	38.31
2745	13.2	0.15	0.01	30.51	2795	13.2	0.15	0.01	30.51
2746	13.4	0.15	0.01	27.81	2796	12.3	0.15	0.01	46.11
2747	11.6	0.15	0.01	63.61	2797	8.4	0.15	0.046	123.01
2748	12.7	0.15	0.01	38.31	2798	13.1	0.15	0.01	31.91
2749	12.1	0.15	0.01	50.51	2799	14.5	0.15	0.011	18.01
2750	13.1	0.15	0.01	31.91	2800	12.8	0.15	0.01	36.61

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2801	12.2	0.15	0.01	48.31	2851	12.3	0.15	0.01	46.11
2802	11.0	0.15	0.01	83.91	2852	12.3	0.15	0.01	46.11
2803	11.8	0.15	0.01	58.01	2853	13.4	0.15	0.01	27.81
2804	11.7	0.15	0.086	26.01	2854	13.2	0.15	0.01	30.51
2805	12.2	0.15	0.01	48.31	2855	13.0	0.15	0.01	33.41
2806	13.3	0.15	0.057	20.01	2856	11.0	0.15	0.078	27.01
2807	12.6	0.15	0.01	40.11	2857	12.7	0.15	0.01	38.31
2808	11.0	0.15	0.01	83.91	2858	13.7	0.15	0.01	24.21
2809	13.60	0.15	0.01	25.32	2859	13.5	0.15	0.01	26.51
2810	12.6	0.15	0.01	40.11	2860	12.6	0.15	0.01	40.11
2811	11.9	0.15	0.01	55.41	2861	12.4	0.15	0.01	44.01
2812	13.5	0.15	0.01	26.51	2862	12.8	0.15	0.01	36.61
2813	11.0	0.15	0.036	36.01	2863	12.0	0.15	0.01	52.91
2814	12.6	0.15	0.01	40.11	2864	12.5	0.15	0.042	18.01
2815	13.2	0.15	0.01	30.51	2865	11.4	0.15	0.140	17.01
2816	11.7	0.15	0.046	26.01	2866	11.9	0.15	0.01	55.41
2817	13.9	0.15	0.01	22.11	2867	12.9	0.15	0.01	35.01
2818	13.7	0.15	0.01	24.21	2868	13.1	0.15	0.014	25.01
2819	12.2	0.15	0.120	13.01	2869	12.1	0.15	0.01	50.51
2820	12.9	0.15	0.01	35.01	2870	12.8	0.15	0.01	36.61
2821	13.4	0.15	0.01	27.81	2871	12.9	0.15	0.036	19.01
2822	12.4	0.15	0.01	44.01	2872	12.4	0.15	0.056	16.01
2823	13.2	0.15	0.01	30.51	2873	12.99	0.15	0.01	33.52
2824	13.8	0.15	0.01	23.11	2874	13.2	0.15	0.01	30.51
2825	13.4	0.15	0.046	17.01	2875	12.2	0.15	0.01	48.31
2826	10.8	0.15	0.023	41.01	2876	12.9	0.15	0.01	35.01
2827	12.0	0.15	0.01	52.91	2877	12.1	0.15	0.017	36.01
2828	13.3	0.15	0.01	29.11	2878	11.7	0.15	0.01	60.81
2829	10.3	0.15	0.029	47.01	2879	11.7	0.15	0.057	31.01
2830	12.64	0.15	0.01	39.42	2880	12.6	0.15	0.043	18.01
2831	12.6	0.15	0.01	40.11	2881	13.4	0.15	0.01	27.81
2832	12.6	0.15	0.01	40.11	2882	11.9	0.15	0.01	55.41
2833	12.2	0.15	0.01	48.31	2883	13.3	0.15	0.01	29.11
2834	12.0	0.15	0.01	52.91	2884	11.8	0.15	0.01	58.01
2835	12.1	0.15	0.033	30.01	2885	14.1	0.15	0.01	20.11
2836	11.4	0.15	0.01	69.81	2886	13.2	0.15	0.01	30.51
2837	11.9	0.15	0.01	55.41	2887	13.0	0.15	0.01	33.41
2838	14.6	0.15	0.01	16.01	2888	13.1	0.15	0.01	31.91
2839	12.3	0.15	0.01	46.11	2889	11.5	0.15	0.01	66.61
2840	12.8	0.15	0.01	36.61	2890	12.9	0.15	0.01	35.01
2841	12.7	0.15	0.01	38.31	2891	11.2	0.15	0.01	76.51
2842	12.0	0.15	0.01	52.91	2892	10.2	0.15	0.043	58.01
2843	13.0	0.15	0.01	33.41	2893	9.23	0.15	0.055	92.02
2844	13.4	0.15	0.01	27.81	2894	12.1	0.15	0.01	50.51
2845	13.4	0.15	0.01	27.81	2895	9.3	0.15	0.01	183.51
2846	10.7	0.15	0.100	31.01	2896	12.7	0.15	0.01	38.31
2847	12.5	0.15	0.01	42.01	2897	13.4	0.15	0.01	27.81
2848	11.1	0.15	0.070	25.01	2898	12.5	0.15	0.01	42.01
2849	12.7	0.15	0.056	17.01	2899	13.5	0.15	0.01	26.51
2850	11.9	0.15	0.01	55.41	2900	12.3	0.15	0.01	46.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
2901	11.9	0.15	0.01	55.41	2951	10.0	0.15	0.054	52.01
2902	14.4	0.15	0.01	17.51	2952	14.1	0.15	0.01	20.11
2903	12.0	0.15	0.01	52.91	2953	11.6	0.15	0.01	63.61
2904	11.6	0.15	0.01	63.61	2954	13.5	0.15	0.01	26.51
2905	12.1	0.15	0.01	50.51	2955	13.5	0.15	0.01	26.51
2906	10.0	0.15	0.060	61.01	2956	12.4	0.15	0.01	44.01
2907	11.5	0.15	0.01	66.61	2957	10.2	0.15	0.170	29.01
2908	11.5	0.15	0.034	33.01	2958	12.2	0.15	0.01	48.31
2909	10.9	0.15	0.066	26.01	2959	11.2	0.15	0.036	42.01
2910	13.8	0.15	0.01	23.11	2960	14.2	0.15	0.01	19.21
2911	11.3	0.15	0.01	73.01	2961	13.0	0.15	0.01	33.41
2912	12.7	0.15	0.01	38.31	2962	11.3	0.15	0.01	73.01
2913	12.6	0.15	0.01	40.11	2963	12.3	0.15	0.01	46.11
2914	13.8	0.15	0.01	23.11	2964	12.2	0.15	0.01	48.31
2915	13.3	0.15	0.01	29.11	2965	13.6	0.15	0.01	25.31
2916	13.4	0.15	0.01	27.81	2966	13.4	0.15	0.01	27.81
2917	12.0	0.15	0.01	52.91	2967	11.0	0.15	0.047	35.01
2918	11.9	0.15	0.01	55.41	2968	14.3	0.15	0.01	18.31
2919	11.6	0.15	0.01	63.61	2969	12.6	0.15	0.01	40.11
2920	8.8	0.15	0.034	123.01	2970	12.5	0.15	0.01	42.01
2921	13.3	0.15	0.01	29.11	2971	13.5	0.15	0.01	26.51
2922	13.7	0.15	0.065	11.01	2972	13.9	0.15	0.01	22.11
2923	13.6	0.15	0.01	25.31	2973	12.9	0.15	0.01	35.01
2924	12.7	0.15	0.01	38.31	2974	13.9	0.15	0.01	22.11
2925	14.0	0.15	0.01	21.11	2975	12.7	0.15	0.01	38.31
2926	13.3	0.15	0.01	29.11	2976	10.9	0.15	0.044	42.01
2927	12.1	0.15	0.01	50.51	2977	12.7	0.15	0.01	38.31
2928	11.3	0.15	0.035	32.01	2978	11.7	0.15	0.01	60.81
2929	11.6	0.15	0.01	63.61	2979	12.1	0.15	0.039	29.01
2930	12.4	0.15	0.01	44.01	2980	13.2	0.15	0.01	30.51
2931	11.7	0.15	0.01	60.81	2981	12.0	0.15	0.01	52.91
2932	11.6	0.15	0.015	48.01	2982	11.9	0.15	0.01	55.41
2933	11.7	0.15	0.068	23.01	2983	11.2	0.15	0.055	33.01
2934	11.2	0.15	0.058	31.01	2984	13.1	0.15	0.013	27.01
2935	13.0	0.15	0.01	33.41	2985	12.1	0.15	0.01	50.51
2936	12.4	0.15	0.01	44.01	2986	11.9	0.15	0.051	22.01
2937	12.9	0.15	0.01	35.01	2987	12.1	0.15	0.01	50.51
2938	11.5	0.15	0.01	66.61	2988	11.7	0.15	0.01	60.81
2939	12.6	0.15	0.01	40.11	2989	13.2	0.15	0.050	14.01
2940	14.0	0.15	0.01	21.11	2990	13.4	0.15	0.01	27.81
2941	13.9	0.15	0.01	22.11	2991	13.5	0.15	0.01	26.51
2942	13.2	0.15	0.01	30.51	2992	13.0	0.15	0.01	33.41
2943	12.8	0.15	0.01	36.61	2993	12.3	0.15	0.099	12.01
2944	12.8	0.15	0.01	36.61	2994	13.9	0.15	0.01	22.11
2945	12.2	0.15	0.01	48.31	2995	12.4	0.15	0.062	15.01
2946	13.0	0.15	0.01	33.41	2996	11.8	0.15	0.01	58.01
2947	13.0	0.15	0.01	33.41	2997	13.5	0.15	0.01	26.51
2948	12.5	0.15	0.01	42.01	2998	14.3	0.15	0.01	18.31
2949	13.3	0.15	0.01	29.11	2999	13.4	0.15	0.01	27.81
2950	11.9	0.15	0.081	17.01	3000	13.0	0.15	0.01	33.41

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3001	12.4	0.15	0.01	44.01	3051	12.8	0.15	0.055	16.01
3002	12.8	0.15	0.01	36.61	3052	13.1	0.15	0.050	13.01
3003	11.3	0.15	0.061	28.01	3053	12.9	0.15	0.01	35.01
3004	14.3	0.15	0.01	18.31	3054	11.3	0.15	0.059	27.01
3005	13.7	0.15	0.01	24.21	3055	12.5	0.15	0.01	42.01
3006	13.5	0.15	0.051	11.01	3056	12.9	0.15	0.01	35.01
3007	12.4	0.15	0.01	44.01	3057	13.4	0.15	0.01	27.81
3008	12.0	0.15	0.01	52.91	3058	14.3	0.15	0.01	18.31
3009	14.1	0.15	0.100	7.01	3059	13.7	0.15	0.01	24.21
3010	12.2	0.15	0.01	48.31	3060	13.4	0.15	0.01	27.81
3011	11.9	0.15	0.01	55.41	3061	11.9	0.15	0.042	26.01
3012	11.1	0.15	0.022	64.01	3062	10.8	0.15	0.094	27.01
3013	13.3	0.15	0.044	12.01	3063	8.6	0.15	0.037	125.01
3014	13.0	0.15	0.01	33.41	3064	13.0	0.15	0.01	33.41
3015	11.1	0.15	0.01	80.11	3065	11.8	0.15	0.01	58.01
3016	12.4	0.15	0.01	44.01	3066	11.2	0.15	0.01	76.51
3017	12.2	0.15	0.01	48.31	3067	13.0	0.15	0.01	33.41
3018	12.8	0.15	0.01	36.61	3068	13.2	0.15	0.01	30.51
3019	11.7	0.15	0.01	60.81	3069	13.8	0.15	0.01	23.11
3020	12.2	0.15	0.01	48.31	3070	13.8	0.15	0.01	23.11
3021	11.9	0.15	0.01	55.41	3071	11.8	0.15	0.01	58.01
3022	13.4	0.15	0.01	27.81	3072	14.0	0.15	0.01	21.11
3023	13.6	0.15	0.01	25.31	3073	13.5	0.15	0.01	26.51
3024	10.7	0.15	0.053	41.01	3074	13.6	0.15	0.01	25.31
3025	11.6	0.15	0.014	52.01	3075	13.9	0.15	0.01	22.11
3026	11.9	0.15	0.062	21.01	3076	13.7	0.15	0.01	24.21
3027	13.3	0.15	0.01	29.11	3077	12.7	0.15	0.01	38.31
3028	10.7	0.15	0.110	28.01	3078	11.6	0.15	0.045	31.01
3029	13.0	0.15	0.01	33.41	3079	13.3	0.15	0.01	29.11
3030	14.3	0.15	0.01	18.31	3080	11.7	0.15	0.01	60.81
3031	13.0	0.15	0.01	33.41	3081	13.8	0.15	0.01	23.11
3032	11.4	0.15	0.065	27.01	3082	12.3	0.15	0.01	46.11
3033	13.0	0.15	0.01	33.41	3083	13.8	0.15	0.01	23.11
3034	12.3	0.15	0.01	46.11	3084	13.2	0.15	0.01	30.51
3035	12.4	0.15	0.01	44.01	3085	13.1	0.15	0.01	31.91
3036	9.8	0.15	0.110	44.01	3086	13.6	0.15	0.01	25.31
3037	11.6	0.15	0.110	21.01	3087	12.8	0.15	0.01	36.61
3038	13.7	0.15	0.01	24.21	3088	11.8	0.15	0.01	58.01
3039	12.5	0.15	0.01	42.01	3089	11.0	0.15	0.058	39.01
3040	14.5	0.15	0.01	16.71	3090	12.1	0.15	0.01	50.51
3041	12.5	0.15	0.01	42.01	3091	14.9	0.15	0.01	13.91
3042	13.8	0.15	0.01	23.11	3092	11.0	0.15	0.065	38.01
3043	13.6	0.15	0.01	25.31	3093	11.5	0.15	0.01	66.61
3044	12.0	0.15	0.063	24.01	3094	12.0	0.15	0.061	24.01
3045	11.4	0.15	0.01	69.81	3095	11.3	0.15	0.01	73.01
3046	12.2	0.15	0.056	20.01	3096	12.7	0.15	0.01	38.31
3047	12.7	0.15	0.01	38.31	3097	12.1	0.15	0.034	24.01
3048	13.4	0.15	0.01	27.81	3098	14.7	0.15	0.01	15.31
3049	11.6	0.15	0.01	63.61	3099	11.4	0.15	0.01	69.81
3050	14.1	0.15	0.01	20.11	3100	13.9	0.15	0.01	22.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3101	13.2	0.15	0.01	30.51	3151	12.1	0.15	0.01	50.51
3102	16.70	0.15	0.01	6.12	3152	11.3	0.15	0.047	35.01
3103	15.38	0.15	0.01	11.22	3153	13.3	0.15	0.01	29.11
3104	11.1	0.15	0.120	22.01	3154	12.6	0.15	0.01	40.11
3105	13.1	0.15	0.01	31.91	3155	12.6	0.15	0.01	40.11
3106	10.8	0.15	0.01	92.01	3156	11.3	0.15	0.040	32.01
3107	13.8	0.15	0.01	23.11	3157	11.5	0.15	0.032	34.01
3108	13.9	0.15	0.01	22.11	3158	12.5	0.15	0.01	42.01
3109	11.6	0.15	0.099	24.01	3159	13.0	0.15	0.01	33.41
3110	13.2	0.15	0.01	30.51	3160	13.5	0.15	0.01	26.51
3111	13.9	0.15	0.01	22.11	3161	12.1	0.15	0.087	15.01
3112	12.9	0.15	0.01	35.01	3162	11.3	0.15	0.01	73.01
3113	13.2	0.15	0.01	30.51	3163	13.6	0.15	0.01	25.31
3114	13.5	0.15	0.01	26.51	3164	11.9	0.15	0.090	19.01
3115	11.3	0.15	0.140	20.01	3165	12.8	0.15	0.01	36.61
3116	12.5	0.15	0.01	42.01	3166	13.0	0.15	0.100	12.01
3117	12.3	0.15	0.01	46.11	3167	11.4	0.15	0.01	69.81
3118	10.9	0.15	0.048	37.01	3168	11.8	0.15	0.034	30.01
3119	12.2	0.15	0.01	48.31	3169	12.73	0.15	0.01	37.82
3120	11.6	0.15	0.01	63.61	3170	12.0	0.15	0.01	52.91
3121	13.4	0.15	0.01	27.81	3171	10.8	0.15	0.041	47.01
3122	14.2	0.15	0.01	19.21	3172	13.4	0.15	0.01	27.81
3123	13.54	0.15	0.01	26.02	3173	13.2	0.15	0.01	30.51
3124	13.46	0.15	0.01	27.02	3174	11.8	0.15	0.01	58.01
3125	12.3	0.15	0.01	46.11	3175	14.1	0.15	0.030	17.01
3126	11.5	0.15	0.01	66.61	3176	10.9	0.15	0.066	37.01
3127	12.2	0.15	0.025	31.01	3177	11.9	0.15	0.01	55.41
3128	11.5	0.15	0.01	66.61	3178	11.9	0.15	0.01	55.41
3129	12.4	0.15	0.01	44.01	3179	11.9	0.15	0.01	55.41
3130	12.8	0.15	0.01	36.61	3180	14.6	0.15	0.01	16.01
3131	12.7	0.15	0.01	38.31	3181	12.8	0.15	0.01	36.61
3132	11.6	0.15	0.024	38.01	3182	12.2	0.15	0.031	27.01
3133	13.2	0.15	0.01	30.51	3183	12.7	0.15	0.01	38.31
3134	10.7	0.15	0.041	55.01	3184	12.1	0.15	0.01	50.51
3135	14.0	0.15	0.01	21.11	3185	14.0	0.15	0.01	21.11
3136	11.8	0.15	0.01	58.01	3186	12.3	0.15	0.01	46.11
3137	13.4	0.15	0.01	27.81	3187	13.2	0.15	0.050	17.01
3138	13.4	0.15	0.01	27.81	3188	14.1	0.15	0.01	20.11
3139	9.9	0.15	0.044	45.01	3189	12.6	0.15	0.01	40.11
3140	10.9	0.15	0.082	29.01	3190	12.8	0.15	0.01	36.61
3141	10.5	0.15	0.078	43.01	3191	12.1	0.15	0.01	50.51
3142	12.3	0.15	0.01	46.11	3192	13.7	0.15	0.01	24.21
3143	12.6	0.15	0.01	40.11	3193	13.4	0.15	0.014	25.01
3144	13.6	0.15	0.012	28.01	3194	12.0	0.15	0.100	18.01
3145	14.4	0.15	0.01	17.51	3195	12.4	0.15	0.01	44.01
3146	13.2	0.15	0.01	30.51	3196	12.3	0.15	0.01	46.11
3147	13.7	0.15	0.011	28.01	3197	11.7	0.15	0.050	25.01
3148	11.8	0.15	0.014	51.01	3198	12.3	0.15	0.01	46.11
3149	14.0	0.15	0.01	21.11	3199	14.84	0.15	0.01	14.32
3150	11.0	0.15	0.065	33.01	3200	14.6	0.15	0.089	5.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3201	13.7	0.15	0.011	22.01	3251	12.9	0.15	0.01	35.01
3202	10.3	0.15	0.01	115.81	3252	11.9	0.15	0.01	55.41
3203	13.7	0.15	0.01	24.21	3253	13.5	0.15	0.01	26.51
3204	12.1	0.15	0.01	50.51	3254	11.1	0.15	0.01	80.11
3205	13.5	0.15	0.01	26.51	3255	13.7	0.15	0.01	24.21
3206	13.6	0.15	0.01	25.31	3256	12.3	0.15	0.023	29.01
3207	12.0	0.15	0.040	19.01	3257	13.5	0.15	0.01	26.51
3208	12.1	0.15	0.01	50.51	3258	13.4	0.15	0.01	27.81
3209	13.4	0.15	0.01	27.81	3259	9.9	0.15	0.100	37.01
3210	11.2	0.15	0.01	76.51	3260	12.6	0.15	0.041	18.01
3211	12.7	0.15	0.014	32.01	3261	11.6	0.15	0.01	63.61
3212	13.9	0.15	0.01	22.11	3262	10.8	0.15	0.01	92.01
3213	11.9	0.15	0.01	55.41	3263	13.0	0.15	0.01	33.41
3214	10.8	0.15	0.100	29.01	3264	12.2	0.15	0.036	24.01
3215	12.1	0.15	0.01	50.51	3265	13.3	0.15	0.01	29.11
3216	14.0	0.15	0.01	21.11	3266	13.6	0.15	0.01	25.31
3217	14.4	0.15	0.01	17.51	3267	13.0	0.15	0.01	33.41
3218	14.1	0.15	0.01	20.11	3268	13.02	0.15	0.01	33.12
3219	11.7	0.15	0.01	60.81	3269	12.8	0.15	0.01	36.61
3220	13.3	0.15	0.01	29.11	3270	14.5	0.15	0.01	16.71
3221	13.3	0.15	0.01	29.11	3271	16.8	0.15	0.01	5.81
3222	11.4	0.15	0.042	33.01	3272	13.2	0.15	0.01	30.51
3223	11.2	0.15	0.083	24.01	3273	11.9	0.15	0.045	35.01
3224	11.5	0.15	0.042	34.01	3274	12.1	0.15	0.01	50.51
3225	13.5	0.15	0.01	26.51	3275	13.3	0.15	0.025	15.01
3226	13.4	0.15	0.01	27.81	3276	12.0	0.15	0.01	52.91
3227	12.4	0.15	0.01	44.01	3277	11.3	0.15	0.01	73.01
3228	12.6	0.15	0.01	40.11	3278	11.2	0.15	0.046	35.01
3229	12.5	0.15	0.01	42.01	3279	13.6	0.15	0.01	25.31
3230	12.3	0.15	0.051	26.01	3280	12.2	0.15	0.01	48.31
3231	13.1	0.15	0.01	31.91	3281	12.6	0.15	0.01	40.11
3232	11.8	0.15	0.01	58.01	3282	13.3	0.15	0.01	29.11
3233	12.9	0.15	0.01	35.01	3283	13.0	0.15	0.061	15.01
3234	12.5	0.15	0.026	29.01	3284	13.0	0.15	0.01	33.41
3235	13.1	0.15	0.01	31.91	3285	12.3	0.15	0.190	10.01
3236	13.7	0.15	0.01	24.21	3286	12.9	0.15	0.01	35.01
3237	10.6	0.15	0.061	30.01	3287	14.2	0.15	0.01	19.21
3238	13.2	0.15	0.037	15.01	3288	15	0.15	0.01	13.32
3239	14.3	0.15	0.01	18.31	3289	14.2	0.15	0.01	19.21
3240	10.1	0.15	0.01	126.91	3290	11.7	0.15	0.01	60.81
3241	12.2	0.15	0.060	20.01	3291	12.4	0.15	0.01	44.01
3242	12.4	0.15	0.01	44.01	3292	12.4	0.15	0.01	44.01
3243	11.6	0.15	0.01	63.61	3293	14.0	0.15	0.01	21.11
3244	13.9	0.15	0.01	22.11	3294	12.7	0.15	0.01	38.31
3245	13.4	0.15	0.01	27.81	3295	12.7	0.15	0.01	38.31
3246	11.4	0.15	0.01	69.81	3296	12.0	0.15	0.01	52.91
3247	13.0	0.15	0.035	17.01	3297	12.3	0.15	0.01	46.11
3248	10.8	0.15	0.029	50.01	3298	13.4	0.15	0.032	16.01
3249	13.7	0.15	0.01	24.21	3299	13.5	0.15	0.01	26.51
3250	11.5	0.15	0.01	66.61	3300	10.4	0.15	0.01	110.61

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3301	13.1	0.15	0.01	31.91	3351	13.0	0.15	0.01	33.41
3302	12.9	0.15	0.01	35.01	3352	15.6	0.15	0.01	10.11
3303	11.6	0.15	0.01	63.61	3353	13.3	0.15	0.01	29.11
3304	13.1	0.15	0.01	31.91	3354	13.1	0.15	0.01	31.91
3305	12.2	0.15	0.01	48.31	3355	13.5	0.15	0.01	26.51
3306	12.7	0.15	0.01	38.31	3356	13.3	0.15	0.01	29.11
3307	13.8	0.15	0.038	13.01	3357	11.4	0.15	0.01	69.81
3308	11.8	0.15	0.01	58.01	3358	12.3	0.15	0.01	46.11
3309	13.8	0.15	0.01	23.11	3359	14.1	0.15	0.01	20.11
3310	10.8	0.15	0.120	27.01	3360	16.2	0.15	0.01	7.61
3311	12.1	0.15	0.047	22.01	3361	19.03	0.15	0.01	2.12
3312	11.5	0.15	0.034	32.01	3362	18.1	0.15	0.01	3.21
3313	11.9	0.15	0.01	55.41	3363	12.0	0.15	0.01	52.91
3314	13.0	0.15	0.01	33.41	3364	13.0	0.15	0.01	33.41
3315	12.4	0.15	0.01	44.01	3365	12.1	0.15	0.01	50.51
3316	11.7	0.15	0.075	23.01	3366	11.4	0.15	0.01	69.81
3317	8.4	0.15	0.050	127.01	3367	12.2	0.15	0.01	48.31
3318	11.0	0.15	0.01	83.91	3368	11.3	0.15	0.01	73.01
3319	12.1	0.15	0.01	50.51	3369	12.1	0.15	0.01	50.51
3320	13.4	0.15	0.01	27.81	3370	13.8	0.15	0.01	23.11
3321	13.0	0.15	0.01	33.41	3371	12.3	0.15	0.01	46.11
3322	12.1	0.15	0.01	50.51	3372	12.1	0.15	0.01	50.51
3323	13.6	0.15	0.01	25.31	3373	13.6	0.15	0.01	25.31
3324	11.8	0.15	0.110	17.61	3374	12.8	0.15	0.01	36.61
3325	11.4	0.15	0.01	69.81	3375	13.7	0.15	0.01	24.21
3326	12.7	0.15	0.01	38.31	3376	12.4	0.15	0.01	44.01
3327	12.1	0.15	0.01	50.51	3377	12.6	0.15	0.01	40.11
3328	11.7	0.15	0.01	60.81	3378	13.2	0.15	0.01	30.51
3329	11.4	0.15	0.01	69.81	3379	13.3	0.15	0.01	29.11
3330	11.2	0.15	0.01	76.51	3380	12.0	0.15	0.01	52.91
3331	13.2	0.15	0.01	30.51	3381	13.2	0.15	0.01	30.51
3332	11.7	0.15	0.01	60.81	3382	13.1	0.15	0.01	31.91
3333	11.6	0.15	0.01	63.61	3383	12.6	0.15	0.01	40.11
3334	12.0	0.15	0.01	52.91	3384	13.6	0.15	0.01	25.31
3335	11.4	0.15	0.01	69.81	3385	12.8	0.15	0.01	36.61
3336	14.5	0.15	0.01	16.71	3386	12.7	0.15	0.01	38.31
3337	12.5	0.15	0.01	42.01	3387	12.7	0.15	0.018	29.71
3338	14.5	0.15	0.01	16.71	3388	13.2	0.15	0.015	21.51
3339	10.9	0.15	0.039	38.71	3389	12.6	0.15	0.01	40.11
3340	13.6	0.15	0.01	25.31	3390	13.4	0.15	0.01	27.81
3341	12.4	0.15	0.01	44.01	3391	10.3	0.15	0.01	115.81
3342	11.9	0.15	0.01	55.41	3392	14.3	0.15	0.01	18.31
3343	13.4	0.15	0.01	27.81	3393	12.7	0.15	0.01	38.31
3344	12.9	0.15	0.01	35.01	3394	13.3	0.15	0.01	29.11
3345	11.7	0.15	0.055	25.71	3395	11.7	0.15	0.01	60.81
3346	11.1	0.15	0.01	80.11	3396	11.0	0.15	0.01	83.91
3347	11.8	0.15	0.01	58.01	3397	14.2	0.15	0.01	19.21
3348	11.9	0.15	0.01	55.41	3398	13.9	0.15	0.01	22.11
3349	12.8	0.15	0.01	36.61	3399	12.4	0.15	0.01	44.01
3350	14.3	0.15	0.01	18.31	3400	14.1	0.15	0.01	20.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3401	12.8	0.15	0.01	36.61	3451	7.8	0.15	0.01	366.11
3402	15.3	0.15	0.01	11.61	3452	13.2	0.15	0.01	30.51
3403	12.9	0.15	0.01	35.01	3453	11.7	0.15	0.01	60.81
3404	12.8	0.15	0.01	36.61	3454	13.7	0.15	0.01	24.21
3405	12.3	0.15	0.01	46.11	3455	12.9	0.15	0.01	35.01
3406	11.3	0.15	0.01	73.01	3456	13.7	0.15	0.01	24.21
3407	12.6	0.15	0.01	40.11	3457	11.8	0.15	0.01	58.01
3408	13.2	0.15	0.01	30.51	3458	12.8	0.15	0.01	36.61
3409	12.0	0.15	0.01	52.91	3459	12.9	0.15	0.01	35.01
3410	13.2	0.15	0.01	30.51	3460	12.1	0.15	0.01	50.51
3411	13.5	0.15	0.01	26.51	3461	13.5	0.15	0.01	26.51
3412	13.5	0.15	0.01	26.51	3462	13.3	0.15	0.01	29.11
3413	13.4	0.15	0.01	27.81	3463	13.2	0.15	0.01	30.51
3414	13.7	0.15	0.01	24.21	3464	13.5	0.15	0.01	26.51
3415	10.5	0.15	0.01	105.61	3465	13.4	0.15	0.01	27.81
3416	14.1	0.15	0.01	20.11	3466	13.2	0.15	0.01	30.51
3417	13.6	0.15	0.01	25.31	3467	13.0	0.15	0.01	33.41
3418	11.4	0.15	0.01	69.81	3468	11.7	0.15	0.01	60.81
3419	10.5	0.15	0.01	105.61	3469	11.1	0.15	0.01	80.11
3420	11.7	0.15	0.01	60.81	3470	13.2	0.15	0.01	30.51
3421	13.6	0.15	0.01	25.31	3471	11.3	0.15	0.01	73.01
3422	12.6	0.15	0.01	40.11	3472	13.5	0.15	0.01	26.51
3423	12.2	0.15	0.01	48.31	3473	13.7	0.15	0.01	24.21
3424	12.6	0.15	0.01	40.11	3474	12.8	0.15	0.01	36.61
3425	10.8	0.15	0.01	92.01	3475	10.7	0.15	0.01	96.31
3426	12.7	0.15	0.01	38.31	3476	11.9	0.15	0.01	55.41
3427	13.5	0.15	0.01	26.51	3477	13.5	0.15	0.01	26.51
3428	12.0	0.15	0.01	52.91	3478	12.8	0.15	0.01	36.61
3429	13.8	0.15	0.01	23.11	3479	11.5	0.15	0.01	66.61
3430	12.4	0.15	0.01	44.01	3480	13.1	0.15	0.01	31.91
3431	10.0	0.15	0.01	132.91	3481	13.4	0.15	0.01	27.81
3432	11.5	0.15	0.01	66.61	3482	12.1	0.15	0.01	50.51
3433	13.2	0.15	0.01	30.51	3483	13.7	0.15	0.01	24.21
3434	13.1	0.15	0.01	31.91	3484	12.4	0.15	0.01	44.01
3435	13.0	0.15	0.01	33.41	3485	12.9	0.15	0.01	35.01
3436	12.1	0.15	0.01	50.51	3486	13.5	0.15	0.01	26.51
3437	13.3	0.15	0.01	29.11	3487	12.8	0.15	0.01	36.61
3438	11.5	0.15	0.01	66.61	3488	12.9	0.15	0.01	35.01
3439	12.5	0.15	0.01	42.01	3489	13.3	0.15	0.01	29.11
3440	12.2	0.15	0.01	48.31	3490	13.3	0.15	0.01	29.11
3441	12.2	0.15	0.01	48.31	3491	12.3	0.15	0.01	46.11
3442	11.6	0.15	0.01	63.61	3492	11.5	0.15	0.01	66.61
3443	13.3	0.15	0.01	29.11	3493	13.3	0.15	0.01	29.11
3444	12.4	0.15	0.01	44.01	3494	12.9	0.15	0.01	35.01
3445	12.1	0.15	0.01	50.51	3495	11.5	0.15	0.01	66.61
3446	13.4	0.15	0.042	34.11	3496	14.9	0.15	0.01	13.91
3447	13.2	0.15	0.01	30.51	3497	12.1	0.15	0.01	50.51
3448	13.1	0.15	0.01	31.91	3498	13.4	0.15	0.01	27.81
3449	12.4	0.15	0.01	44.01	3499	12.4	0.15	0.01	44.01
3450	12.6	0.15	0.01	40.11	3500	12.8	0.15	0.01	36.61

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3501	11.6	0.15	0.01	63.61	3551	16.75	0.15	0.01	5.92
3502	11.8	0.15	0.01	58.01	3552	13.0	0.15	0.01	33.41
3503	13.5	0.15	0.01	26.51	3553	16.6	0.15	0.01	6.41
3504	11.8	0.15	0.01	58.01	3554	15.82	0.15	0.01	9.12
3505	11.8	0.15	0.063	24.01	3555	12.6	0.15	0.01	40.11
3506	11.4	0.15	0.01	69.81	3556	12.4	0.15	0.01	44.01
3507	11.3	0.15	0.01	73.01	3557	10.7	0.15	0.01	96.31
3508	12.5	0.15	0.01	42.01	3558	12.4	0.15	0.01	44.01
3509	12.8	0.15	0.01	36.61	3559	13.8	0.15	0.01	23.11
3510	12.5	0.15	0.01	42.01	3560	10.5	0.15	0.01	105.61
3511	12.3	0.15	0.01	46.11	3561	10.7	0.15	0.01	96.31
3512	13.6	0.15	0.01	25.31	3562	13.1	0.15	0.01	31.91
3513	12.9	0.15	0.01	35.01	3563	11.3	0.15	0.01	73.01
3514	11.7	0.15	0.01	60.81	3564	9.0	0.15	0.01	210.71
3515	12.1	0.15	0.01	50.51	3565	11.3	0.15	0.01	73.01
3516	12.1	0.15	0.01	50.51	3566	12.5	0.15	0.01	42.01
3517	14.0	0.15	0.01	21.11	3567	12.5	0.15	0.01	42.01
3518	12.2	0.15	0.01	48.31	3568	12.2	0.15	0.01	48.31
3519	13.1	0.15	0.01	31.91	3569	12.8	0.15	0.01	36.61
3520	13.6	0.15	0.01	25.31	3570	11.4	0.15	0.01	69.81
3521	14.3	0.15	0.01	18.31	3571	11.1	0.15	0.01	80.11
3522	12.2	0.15	0.01	48.31	3572	12.8	0.15	0.01	36.61
3523	12.4	0.15	0.01	44.01	3573	12.6	0.15	0.01	40.11
3524	13.3	0.15	0.01	29.11	3574	13.9	0.15	0.01	22.11
3525	12.0	0.15	0.01	52.91	3575	11.7	0.15	0.01	60.81
3526	12.1	0.15	0.01	50.51	3576	13.1	0.15	0.01	31.91
3527	13.0	0.15	0.01	33.41	3577	10.8	0.15	0.01	92.01
3528	12.9	0.15	0.01	35.01	3578	8.1	0.15	0.01	318.91
3529	14.0	0.15	0.01	21.11	3579	14.7	0.15	0.01	15.31
3530	13.8	0.15	0.01	23.11	3580	12.6	0.15	0.01	40.11
3531	12.9	0.15	0.01	35.01	3581	11.9	0.15	0.01	55.41
3532	12.0	0.15	0.01	52.91	3582	11.3	0.15	0.01	73.01
3533	12.6	0.15	0.01	40.11	3583	13.3	0.15	0.01	29.11
3534	12.4	0.15	0.01	44.01	3584	12.0	0.15	0.01	52.91
3535	13.9	0.15	0.01	22.11	3585	12.4	0.15	0.01	44.01
3536	13.8	0.15	0.01	23.11	3586	13.1	0.15	0.01	31.91
3537	13.2	0.15	0.01	30.51	3587	12.3	0.15	0.01	46.11
3538	13.4	0.15	0.01	27.81	3588	12.0	0.15	0.01	52.91
3539	13.1	0.15	0.01	31.91	3589	13.7	0.15	0.01	24.21
3540	9.0	0.15	0.01	210.71	3590	13.3	0.15	0.01	29.11
3541	12.6	0.15	0.01	40.11	3591	11.5	0.15	0.01	66.61
3542	11.9	0.15	0.01	55.41	3592	13.6	0.15	0.01	25.31
3543	11.4	0.15	0.01	69.81	3593	14.4	0.15	0.01	17.51
3544	12.4	0.15	0.01	44.01	3594	12.7	0.15	0.01	38.31
3545	12.0	0.15	0.01	52.91	3595	12.8	0.15	0.01	36.61
3546	12.3	0.15	0.01	46.11	3596	9.4	0.15	0.01	175.21
3547	13.3	0.15	0.01	29.11	3597	11.5	0.15	0.01	66.61
3548	9.4	0.15	0.01	175.21	3598	11.8	0.15	0.01	58.01
3549	12.8	0.15	0.01	36.61	3599	12.0	0.15	0.01	52.91
3550	11.8	0.15	0.01	58.01	3600	12.9	0.15	0.01	35.01

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3601	12.4	0.15	0.01	44.01	3651	13.6	0.15	0.022	16.21
3602	14.3	0.15	0.01	18.31	3652	12.7	0.15	0.01	38.31
3603	12.8	0.15	0.01	36.61	3653	13.4	0.15	0.01	27.81
3604	13.0	0.15	0.01	33.41	3654	14.3	0.15	0.01	18.31
3605	13	0.15	0.01	33.41	3655	11.0	0.15	0.01	83.91
3606	12.3	0.15	0.01	46.11	3656	13.9	0.15	0.01	22.11
3607	14.8	0.15	0.01	14.61	3657	12.6	0.15	0.01	40.11
3608	10.9	0.15	0.01	87.81	3658	13.8	0.15	0.01	23.11
3609	11.9	0.15	0.01	55.41	3659	13.6	0.15	0.01	25.31
3610	14.5	0.15	0.01	16.71	3660	11.3	0.15	0.01	73.01
3611	12.7	0.15	0.01	38.31	3661	12.0	0.15	0.01	52.91
3612	13.5	0.15	0.01	26.51	3662	12.0	0.15	0.011	29.51
3613	12.6	0.15	0.01	40.11	3663	12.4	0.15	0.01	44.01
3614	10.7	0.15	0.01	96.31	3664	12.4	0.15	0.01	44.01
3615	11.1	0.15	0.01	80.11	3665	12.4	0.15	0.01	44.01
3616	12.1	0.15	0.01	50.51	3666	11.9	0.15	0.01	55.41
3617	12.0	0.15	0.01	52.91	3667	11.9	0.15	0.01	55.41
3618	12.5	0.15	0.016	37.61	3668	13.4	0.15	0.01	27.81
3619	13.9	0.15	0.01	22.11	3669	13.3	0.15	0.01	29.11
3620	12.1	0.15	0.01	50.51	3670	12.0	0.15	0.01	52.91
3621	12.2	0.15	0.01	48.31	3671	16.3	0.15	0.01	7.31
3622	11.3	0.15	0.01	73.01	3672	13.4	0.15	0.01	27.81
3623	12.2	0.15	0.01	48.31	3673	13.0	0.15	0.01	33.41
3624	13.7	0.15	0.01	24.21	3674	11.7	0.15	0.01	60.81
3625	11.4	0.15	0.01	69.81	3675	11.1	0.15	0.01	80.11
3626	12.1	0.15	0.01	50.51	3676	14.0	0.15	0.01	21.11
3627	13.4	0.15	0.01	27.81	3677	14.0	0.15	0.01	21.11
3628	12.6	0.15	0.01	40.11	3678	13	0.15	0.01	33.41
3629	12.6	0.15	0.01	40.11	3679	13.7	0.15	0.01	24.21
3630	12.8	0.15	0.01	36.61	3680	12.9	0.15	0.01	35.01
3631	10.4	0.15	0.01	110.61	3681	13.5	0.15	0.01	26.51
3632	12.5	0.15	0.01	42.01	3682	11.5	0.15	0.01	66.61
3633	12.5	0.15	0.01	42.01	3683	11.01	0.15	0.01	83.51
3634	13.9	0.15	0.01	22.11	3684	13.4	0.15	0.01	27.81
3635	14.5	0.15	0.01	16.71	3685	13.4	0.15	0.01	27.81
3636	13.9	0.15	0.01	22.11	3686	12.0	0.15	0.01	52.91
3637	12.2	0.15	0.01	48.31	3687	11.7	0.15	0.01	60.81
3638	11.4	0.15	0.01	69.81	3688	14.9	0.15	0.01	13.91
3639	13.7	0.15	0.01	24.21	3689	12.2	0.15	0.01	48.31
3640	12.8	0.15	0.01	36.61	3690	13.9	0.15	0.01	22.11
3641	11.7	0.15	0.01	60.81	3691	14.5	0.15	0.01	16.71
3642	11.2	0.15	0.01	76.51	3692	13.3	0.15	0.01	29.11
3643	13.2	0.15	0.01	30.51	3693	11.7	0.15	0.027	29.21
3644	13.2	0.15	0.01	30.51	3694	10.5	0.15	0.01	105.61
3645	12.0	0.15	0.01	52.91	3695	14.1	0.15	0.01	20.11
3646	12.9	0.15	0.01	35.01	3696	12.5	0.15	0.01	42.01
3647	11.5	0.15	0.01	66.61	3697	13.6	0.15	0.01	25.31
3648	13.0	0.15	0.01	33.41	3698	13.3	0.15	0.01	29.11
3649	11.7	0.15	0.01	60.81	3699	12.9	0.15	0.01	35.01
3650	12.0	0.15	0.01	52.91	3700	12.6	0.15	0.01	40.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3701	12.3	0.15	0.01	46.11	3751	11.8	0.15	0.01	58.01
3702	11.6	0.15	0.01	63.61	3752	15.5	0.15	0.01	10.61
3703	14.4	0.15	0.01	17.51	3753	14.4	0.15	0.01	17.51
3704	12.5	0.15	0.01	42.01	3754	10.1	0.15	0.01	126.91
3705	12.6	0.15	0.01	40.11	3755	13.9	0.15	0.01	22.11
3706	13.8	0.15	0.01	23.11	3756	13.8	0.15	0.01	23.11
3707	13.4	0.15	0.01	27.81	3757	18.95	0.15	0.01	2.22
3708	9.2	0.15	0.01	192.11	3758	12.7	0.15	0.01	38.31
3709	9.1	0.15	0.01	201.21	3759	11.9	0.15	0.01	55.41
3710	12.7	0.15	0.01	38.31	3760	12.5	0.15	0.01	42.01
3711	12.6	0.15	0.01	40.11	3761	11.2	0.15	0.01	76.51
3712	11.8	0.15	0.01	58.01	3762	13.4	0.15	0.01	27.81
3713	11.3	0.15	0.01	73.01	3763	12.7	0.15	0.01	38.31
3714	12.9	0.15	0.01	35.01	3764	13.3	0.15	0.01	29.11
3715	13.5	0.15	0.01	26.51	3765	12.5	0.15	0.01	42.01
3716	13.8	0.15	0.01	23.11	3766	11.7	0.15	0.01	60.81
3717	11.9	0.15	0.01	55.41	3767	11.5	0.15	0.01	66.61
3718	12.7	0.15	0.01	38.31	3768	11.1	0.15	0.01	80.11
3719	13.4	0.15	0.01	27.81	3769	13.7	0.15	0.01	24.21
3720	13.0	0.15	0.01	33.41	3770	14.5	0.15	0.01	16.71
3721	11.7	0.15	0.01	60.81	3771	14.1	0.15	0.01	20.11
3722	12.9	0.15	0.01	35.01	3772	11.2	0.15	0.01	76.51
3723	13.6	0.15	0.01	25.31	3773	13.2	0.15	0.01	30.51
3724	11.5	0.15	0.01	66.61	3774	11.3	0.15	0.01	73.01
3725	13.8	0.15	0.062	11.01	3775	12.3	0.15	0.01	46.11
3726	11.9	0.15	0.01	55.41	3776	10.2	0.15	0.01	121.21
3727	11.3	0.15	0.01	73.01	3777	13.5	0.15	0.01	26.51
3728	11.6	0.15	0.01	63.61	3778	12.5	0.15	0.01	42.01
3729	11.9	0.15	0.01	55.41	3779	11.5	0.15	0.01	66.61
3730	12.0	0.15	0.01	52.91	3780	12.1	0.15	0.01	50.51
3731	10.3	0.15	0.01	115.81	3781	12.1	0.15	0.01	50.51
3732	14.6	0.15	0.01	16.01	3782	12.5	0.15	0.01	42.01
3733	12.8	0.15	0.01	36.61	3783	13.0	0.15	0.01	33.41
3734	12.6	0.15	0.01	40.11	3784	11.0	0.15	0.01	83.91
3735	11.5	0.15	0.01	66.61	3785	12.1	0.15	0.01	50.51
3736	11.1	0.15	0.01	80.11	3786	11.3	0.15	0.01	73.01
3737	12.71	0.15	0.01	38.22	3787	11.7	0.15	0.01	60.81
3738	12.8	0.15	0.01	36.61	3788	11.7	0.15	0.01	60.81
3739	13.4	0.15	0.01	27.81	3789	12.8	0.15	0.01	36.61
3740	14.0	0.15	0.01	21.11	3790	12.4	0.15	0.01	44.01
3741	13.3	0.15	0.01	29.11	3791	12.4	0.15	0.01	44.01
3742	13.2	0.15	0.01	30.51	3792	13.3	0.15	0.01	29.11
3743	13.9	0.15	0.01	22.11	3793	8.5	0.15	0.01	265.21
3744	12.7	0.15	0.01	38.31	3794	9.6	0.15	0.01	159.81
3745	14.2	0.15	0.01	19.21	3795	13.2	0.15	0.01	30.51
3746	12.4	0.15	0.01	44.01	3796	11.8	0.15	0.01	58.01
3747	11.1	0.15	0.01	80.11	3797	12.11	0.15	0.01	50.31
3748	12.8	0.15	0.01	36.61	3798	13.7	0.15	0.01	24.21
3749	13.7	0.15	0.01	24.21	3799	11.7	0.15	0.01	60.81
3750	11.8	0.15	0.01	58.01	3800	15.4	0.15	0.01	11.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3801	11.3	0.15	0.01	73.01	3851	13.9	0.15	0.01	22.11
3802	13.6	0.15	0.01	25.31	3852	12.1	0.15	0.01	50.51
3803	11.2	0.15	0.01	76.51	3853	12.5	0.15	0.01	42.01
3804	12.6	0.15	0.01	40.11	3854	14.7	0.15	0.01	15.31
3805	12.4	0.15	0.01	44.01	3855	13.1	0.15	0.01	31.91
3806	14.7	0.15	0.01	15.31	3856	12.0	0.15	0.01	52.91
3807	13.4	0.15	0.01	27.81	3857	13.4	0.15	0.01	27.81
3808	14.9	0.15	0.01	13.91	3858	13.6	0.15	0.01	25.31
3809	12.6	0.15	0.01	40.11	3859	12.0	0.15	0.01	52.91
3810	13.2	0.15	0.01	30.51	3860	11.9	0.15	0.01	55.41
3811	11.7	0.15	0.01	60.81	3861	12.1	0.15	0.01	50.51
3812	12.1	0.15	0.080	27.01	3862	13.1	0.15	0.01	31.91
3813	13.2	0.15	0.01	30.51	3863	13.1	0.15	0.01	31.91
3814	12.4	0.15	0.01	44.01	3864	13.4	0.15	0.01	27.81
3815	12.2	0.15	0.01	48.31	3865	12.6	0.15	0.01	40.11
3816	12.0	0.15	0.01	52.91	3866	12.0	0.15	0.01	52.91
3817	14.5	0.15	0.01	16.71	3867	12.9	0.15	0.01	35.01
3818	14.3	0.15	0.01	18.31	3868	13.1	0.15	0.01	31.91
3819	12.3	0.15	0.01	46.11	3869	13.0	0.15	0.01	33.41
3820	12.1	0.15	0.01	50.51	3870	12.3	0.15	0.01	46.11
3821	12.0	0.15	0.01	52.91	3871	12.3	0.15	0.01	46.11
3822	13.4	0.15	0.01	27.81	3872	12.8	0.15	0.052	16.71
3823	12.5	0.15	0.01	42.01	3873	11.8	0.15	0.01	58.01
3824	13.0	0.15	0.01	33.41	3874	12.2	0.15	0.01	48.31
3825	13.0	0.15	0.01	33.41	3875	12.9	0.15	0.01	35.01
3826	13.7	0.15	0.01	24.21	3876	11.5	0.15	0.01	66.61
3827	12.2	0.15	0.01	48.31	3877	12.1	0.15	0.01	50.51
3828	11.4	0.15	0.01	69.81	3878	12.8	0.15	0.01	36.61
3829	12.2	0.15	0.01	48.31	3879	13.5	0.15	0.01	26.51
3830	11.5	0.15	0.01	66.61	3880	13.8	0.15	0.01	23.11
3831	13.4	0.15	0.01	27.81	3881	12.8	0.15	0.01	36.61
3832	12.4	0.15	0.01	44.01	3882	12.6	0.15	0.01	40.11
3833	15.5	0.15	0.01	10.61	3883	11.7	0.15	0.01	60.81
3834	13.3	0.15	0.01	29.11	3884	12.6	0.15	0.01	40.11
3835	12.1	0.15	0.01	50.51	3885	12.1	0.15	0.01	50.51
3836	13.8	0.15	0.01	23.11	3886	12.4	0.15	0.01	44.01
3837	12.9	0.15	0.01	35.01	3887	12.2	0.15	0.01	48.31
3838	15.4	0.15	0.01	11.11	3888	12.8	0.15	0.01	36.61
3839	12.9	0.15	0.01	35.01	3889	12.8	0.15	0.01	36.61
3840	13.2	0.15	0.01	30.51	3890	13.3	0.15	0.01	29.11
3841	13.1	0.15	0.01	31.91	3891	14.9	0.15	0.01	13.91
3842	13.1	0.15	0.01	31.91	3892	12.9	0.15	0.01	35.01
3843	10.6	0.15	0.01	100.81	3893	13.2	0.15	0.01	30.51
3844	11.7	0.15	0.01	60.81	3894	11.7	0.15	0.01	60.81
3845	11.7	0.15	0.01	60.81	3895	12.5	0.15	0.01	42.01
3846	12.1	0.15	0.01	50.51	3896	11.5	0.15	0.01	66.61
3847	11.3	0.15	0.01	73.01	3897	12.8	0.15	0.01	36.61
3848	13.3	0.15	0.01	29.11	3898	12.4	0.15	0.01	44.01
3849	13.0	0.15	0.01	33.41	3899	11.3	0.15	0.01	73.01
3850	13.5	0.15	0.01	26.51	3900	13.6	0.15	0.01	25.31

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
3901	12.4	0.15	0.01	44.01	3951	12.9	0.15	0.01	35.01
3902	11.4	0.15	0.01	69.81	3952	14.1	0.15	0.01	20.11
3903	12.1	0.15	0.01	50.51	3953	13.6	0.15	0.01	25.31
3904	11.1	0.15	0.01	80.11	3954	15.0	0.15	0.01	13.31
3905	12.7	0.15	0.01	38.31	3955	11.3	0.15	0.01	73.01
3906	10.9	0.15	0.01	87.81	3956	13.4	0.15	0.01	27.81
3907	11.7	0.15	0.01	60.81	3957	12.4	0.15	0.01	44.01
3908	17.4	0.15	0.01	4.41	3958	12.1	0.15	0.01	50.51
3909	12.0	0.15	0.01	52.91	3959	14.0	0.15	0.01	21.11
3910	12.4	0.15	0.01	44.01	3960	12.0	0.15	0.01	52.91
3911	11.4	0.15	0.01	69.81	3961	12.1	0.15	0.01	50.51
3912	13.4	0.15	0.01	27.81	3962	12.0	0.15	0.01	52.91
3913	12.0	0.15	0.01	52.91	3963	13.6	0.15	0.01	25.31
3914	11.7	0.15	0.01	60.81	3964	13.1	0.15	0.01	31.91
3915	12.2	0.15	0.01	48.31	3965	12.3	0.15	0.01	46.11
3916	12.1	0.15	0.01	50.51	3966	12.1	0.15	0.01	50.51
3917	13.9	0.15	0.01	22.11	3967	11.2	0.15	0.01	76.51
3918	13.6	0.15	0.01	25.31	3968	12.6	0.15	0.01	40.11
3919	14.1	0.15	0.01	20.11	3969	14.2	0.15	0.01	19.21
3920	13.3	0.15	0.01	29.11	3970	12.4	0.15	0.01	44.01
3921	12.6	0.15	0.01	40.11	3971	11.8	0.15	0.01	58.01
3922	12.6	0.15	0.01	40.11	3972	14.6	0.15	0.01	16.01
3923	11.3	0.15	0.01	73.01	3973	13.1	0.15	0.01	31.91
3924	12.3	0.15	0.01	46.11	3974	11.6	0.15	0.01	63.61
3925	10.8	0.15	0.01	92.01	3975	12.3	0.15	0.01	46.11
3926	14.2	0.15	0.01	19.21	3976	11.5	0.15	0.01	66.61
3927	14.1	0.15	0.01	20.11	3977	12.3	0.15	0.01	46.11
3928	13.4	0.15	0.01	27.81	3978	11.7	0.15	0.01	60.81
3929	13.5	0.15	0.01	26.51	3979	11.7	0.15	0.01	60.81
3930	12.1	0.15	0.01	50.51	3980	12.7	0.15	0.01	38.31
3931	13.5	0.15	0.01	26.51	3981	11.9	0.15	0.01	55.41
3932	12.0	0.15	0.01	52.91	3982	12.9	0.15	0.01	35.01
3933	12.5	0.15	0.01	42.01	3983	12.3	0.15	0.01	46.11
3934	13.1	0.15	0.01	31.91	3984	13.9	0.15	0.01	22.11
3935	12.1	0.15	0.01	50.51	3985	11.4	0.15	0.01	69.81
3936	13.1	0.15	0.01	31.91	3986	12.8	0.15	0.01	36.61
3937	11.8	0.15	0.01	58.01	3987	12.2	0.15	0.01	48.31
3938	13	0.15	0.01	33.41	3988	18.3	0.15	0.01	2.91
3939	11.4	0.15	0.01	69.81	3989	14.0	0.15	0.01	21.11
3940	12.7	0.15	0.01	38.31	3990	10.4	0.15	0.01	110.61
3941	12.9	0.15	0.01	35.01	3991	13.2	0.15	0.01	30.51
3942	13.1	0.15	0.01	31.91	3992	11.8	0.15	0.01	58.01
3943	14.2	0.15	0.01	19.21	3993	12.4	0.15	0.01	44.01
3944	13.1	0.15	0.021	20.81	3994	12.6	0.15	0.01	40.11
3945	12.1	0.15	0.01	50.51	3995	12.2	0.15	0.01	48.31
3946	12.1	0.15	0.01	50.51	3996	12.8	0.15	0.01	36.61
3947	11.9	0.15	0.01	55.41	3997	13.3	0.15	0.01	29.11
3948	13.7	0.15	0.01	24.21	3998	12.8	0.15	0.01	36.61
3949	13.2	0.15	0.01	30.51	3999	12.4	0.15	0.01	44.01
3950	12.0	0.15	0.01	52.91	4000	12.3	0.15	0.01	46.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
4001	13.8	0.15	0.01	23.11	4051	12.3	0.15	0.01	46.11
4002	11.9	0.15	0.01	55.41	4052	12.2	0.15	0.01	48.31
4003	10.8	0.15	0.01	92.01	4053	13.2	0.15	0.01	30.51
4004	11.7	0.15	0.01	60.81	4054	12.6	0.15	0.01	40.11
4005	12.5	0.15	0.01	42.01	4055	14.8	0.15	0.01	14.61
4006	12.6	0.15	0.01	40.11	4056	12.4	0.15	0.01	44.01
4007	10.1	0.15	0.01	126.91	4057	9.5	0.15	0.01	167.31
4008	13.1	0.15	0.01	31.91	4058	11.3	0.15	0.01	73.01
4009	12.2	0.15	0.01	48.31	4059	11.7	0.15	0.01	60.81
4010	12.9	0.15	0.01	35.01	4060	9.2	0.15	0.01	192.11
4011	13.8	0.15	0.01	23.11	4061	11.8	0.15	0.01	58.01
4012	13.4	0.15	0.01	27.81	4062	13.8	0.15	0.01	23.11
4013	11.8	0.15	0.01	58.01	4063	9.0	0.15	0.01	210.71
4014	11.9	0.15	0.01	55.41	4064	13.2	0.15	0.01	30.51
4015	15.99	0.15	0.01	8.42	4065	14.2	0.15	0.01	19.21
4016	14.1	0.15	0.01	20.11	4066	13.1	0.15	0.01	31.91
4017	13.1	0.15	0.01	31.91	4067	12.8	0.15	0.01	36.61
4018	13.5	0.15	0.01	26.51	4068	9.5	0.15	0.01	167.31
4019	15.2	0.15	0.01	12.11	4069	14.0	0.15	0.01	21.11
4020	13.0	0.15	0.01	33.41	4070	13.3	0.15	0.01	29.11
4021	13.9	0.15	0.01	22.11	4071	12.1	0.15	0.01	50.51
4022	12.8	0.15	0.01	36.61	4072	13.3	0.15	0.01	29.11
4023	13.5	0.15	0.01	26.51	4073	11.8	0.15	0.01	58.01
4024	12.8	0.15	0.01	36.61	4074	11.8	0.15	0.01	58.01
4025	14.0	0.15	0.01	21.11	4075	12.3	0.15	0.01	46.11
4026	13.3	0.15	0.01	29.11	4076	11.9	0.15	0.01	55.41
4027	13.5	0.15	0.01	26.51	4077	11.3	0.15	0.01	73.01
4028	12.9	0.15	0.01	35.01	4078	11.2	0.15	0.01	76.51
4029	13.0	0.15	0.01	33.41	4079	12.1	0.15	0.01	50.51
4030	13.0	0.15	0.01	33.41	4080	13.3	0.15	0.01	29.11
4031	13.3	0.15	0.01	29.11	4081	12.8	0.15	0.01	36.61
4032	14.4	0.15	0.01	17.51	4082	12.8	0.15	0.01	36.61
4033	13.8	0.15	0.01	23.11	4083	13.0	0.15	0.01	33.41
4034	18.1	0.15	0.01	3.21	4084	11.7	0.15	0.01	60.81
4035	9.1	0.15	0.01	201.21	4085	12.0	0.15	0.01	52.91
4036	12.6	0.15	0.01	40.11	4086	9.1	0.15	0.01	201.21
4037	12.5	0.15	0.01	42.01	4087	13.2	0.15	0.01	30.51
4038	13.5	0.15	0.01	26.51	4088	12.7	0.15	0.01	38.31
4039	12.8	0.15	0.01	36.61	4089	13.0	0.15	0.01	33.41
4040	12.8	0.15	0.01	36.61	4090	13.5	0.15	0.01	26.51
4041	11.3	0.15	0.01	73.01	4091	10.9	0.15	0.01	87.81
4042	13.6	0.15	0.01	25.31	4092	13.2	0.15	0.01	30.51
4043	12.3	0.15	0.01	46.11	4093	11.9	0.15	0.01	55.41
4044	11.9	0.15	0.01	55.41	4094	13.2	0.15	0.01	30.51
4045	11.2	0.15	0.01	76.51	4095	14.2	0.15	0.01	19.21
4046	12.1	0.15	0.01	50.51	4096	11.8	0.15	0.01	58.01
4047	13.0	0.15	0.01	33.41	4097	13.4	0.15	0.01	27.81
4048	14.6	0.15	0.01	16.01	4098	13.4	0.15	0.01	27.81
4049	11.9	0.15	0.01	55.41	4099	12.1	0.15	0.01	50.51
4050	12.4	0.15	0.01	44.01	4100	11.0	0.15	0.01	83.91

ID/1 No.	H	G	Input p.	Input D
4101	12.5	0.15	0.01	42.01
4102	11.5	0.15	0.01	66.61
4103	11.3	0.15	0.01	73.01
4104	12.6	0.15	0.01	40.11
4105	12.2	0.15	0.01	48.31
4106	11.8	0.15	0.01	58.01
4107	11.7	0.15	0.01	60.81
4108	13.3	0.15	0.01	29.11
4109	13.4	0.15	0.01	27.81
4110	11.6	0.15	0.01	63.61
4111	14.9	0.15	0.01	13.91
4112	11.2	0.15	0.01	76.51
4113	13.6	0.15	0.01	25.31
4114	13.7	0.15	0.01	24.21
4115	11.7	0.15	0.01	60.81
4116	13.0	0.15	0.01	33.41
4117	12.6	0.15	0.01	40.11
4118	11.8	0.15	0.01	58.01
4119	12.2	0.15	0.01	48.31
4120	12.2	0.15	0.01	48.31
4121	12.6	0.15	0.01	40.11
4122	12.2	0.15	0.01	48.31
4123	12.8	0.15	0.01	36.61
4124	12.6	0.15	0.01	40.11
4125	13.5	0.15	0.01	26.51
4126	11.6	0.15	0.01	63.61
4127	11.6	0.15	0.01	63.61
4128	13.8	0.15	0.01	23.11
4129	13.3	0.15	0.01	29.11
4130	12.4	0.15	0.01	44.01
4131	11.3	0.15	0.01	73.01
4132	11.8	0.15	0.01	58.01
4133	11.9	0.15	0.01	55.41
4134	13.7	0.15	0.01	24.21
4135	12.0	0.15	0.01	52.91
4136	13.6	0.15	0.01	25.31
4137	12.9	0.15	0.01	35.01
4138	9.8	0.15	0.01	145.71
4139	11.9	0.15	0.01	55.41
4140	11.2	0.15	0.01	76.51
4141	12.6	0.15	0.01	40.11
4142	13.8	0.15	0.01	23.11
4143	12.1	0.15	0.01	50.51
4144	11.5	0.15	0.01	66.61
4145	13.6	0.15	0.01	25.31
4146	13.7	0.15	0.01	24.21
4147	13.0	0.15	0.01	33.41
4148	12.9	0.15	0.01	35.01
4149	12.4	0.15	0.01	44.01
4150	12.9	0.15	0.01	35.01
4151	11.9	0.15	0.01	55.41
4152	12.1	0.15	0.01	50.51
4153	12.4	0.15	0.01	44.01
4154	13.2	0.15	0.01	30.51
4155	12.3	0.15	0.01	46.11
4156	12.0	0.15	0.01	52.91
4157	11.9	0.15	0.01	55.41
4158	11.3	0.15	0.01	73.01
4159	10.8	0.15	0.01	92.01
4160	13.1	0.15	0.01	31.91
4161	12.9	0.15	0.01	35.01
4162	11.6	0.15	0.01	63.61
4163	10.9	0.15	0.01	87.81
4164	12.3	0.15	0.01	46.11
4165	13.3	0.15	0.01	29.11
4166	12.5	0.15	0.01	42.01
4167	12.0	0.15	0.01	52.91
4168	13.9	0.15	0.01	22.11
4169	10.9	0.15	0.01	87.81
4170	11.5	0.15	0.01	66.61
4171	13.6	0.15	0.01	25.31
4172	14.5	0.15	0.01	16.71
4173	13.0	0.15	0.01	33.41
4174	11.6	0.15	0.01	63.61
4175	12.4	0.15	0.01	44.01
4176	11.7	0.15	0.01	60.81
4177	12.8	0.15	0.01	36.61
4178	12.4	0.15	0.01	44.01
4179	14.0	0.15	0.01	21.11
4180	12.7	0.15	0.01	38.31
4181	12.0	0.15	0.01	52.91
4182	12.2	0.15	0.01	48.31
4183	14.5	0.15	0.01	16.71
4184	12.9	0.15	0.01	35.01
4185	13.2	0.15	0.01	30.51
4186	11.5	0.15	0.01	66.61
4187	12.3	0.15	0.01	46.11
4188	12.6	0.15	0.01	40.11
4189	13.4	0.15	0.01	27.81
4190	12.8	0.15	0.01	36.61
4191	12.4	0.15	0.01	44.01
4192	11.5	0.15	0.01	66.61
4193	12.2	0.15	0.01	48.31
4194	12.1	0.15	0.01	50.51
4195	12.3	0.15	0.01	46.11
4196	10.7	0.15	0.01	96.31
4197	14.5	0.15	0.01	16.71
4198	12.8	0.15	0.01	36.61
4199	13.0	0.15	0.01	33.41
4200	13.5	0.15	0.01	26.51

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
4201	11.0	0.15	0.01	83.91	4251	13.9	0.15	0.01	22.11
4202	11.0	0.15	0.01	83.91	4252	12.8	0.15	0.01	36.61
4203	12.1	0.15	0.01	50.51	4253	12.9	0.15	0.01	35.01
4204	13.0	0.15	0.01	33.41	4254	12.0	0.15	0.01	52.91
4205	14.7	0.15	0.01	15.31	4255	13.5	0.15	0.01	26.51
4206	11.9	0.15	0.01	55.41	4256	13.5	0.15	0.01	26.51
4207	11.3	0.15	0.01	73.01	4257	15.8	0.15	0.01	9.21
4208	11.5	0.15	0.01	66.61	4258	11.7	0.15	0.01	60.81
4209	10.8	0.15	0.01	92.01	4259	12.6	0.15	0.01	40.11
4210	11.9	0.15	0.01	55.41	4260	11.9	0.15	0.01	55.41
4211	11.9	0.15	0.01	55.41	4261	12.4	0.15	0.01	44.01
4212	11.5	0.15	0.01	66.61	4262	13.0	0.15	0.01	33.41
4213	13.4	0.15	0.01	27.81	4263	12.4	0.15	0.01	44.01
4214	12.7	0.15	0.01	38.31	4264	13.4	0.15	0.01	27.81
4215	11.7	0.15	0.01	60.81	4265	12.8	0.15	0.01	36.61
4216	14.2	0.15	0.01	19.21	4266	11.9	0.15	0.01	55.41
4217	12.5	0.15	0.01	42.01	4267	14.0	0.15	0.01	21.11
4218	14.3	0.15	0.01	18.31	4268	13.4	0.15	0.01	27.81
4219	12.9	0.15	0.01	35.01	4269	13.8	0.15	0.01	23.11
4220	13.0	0.15	0.01	33.41	4270	13.5	0.15	0.01	26.51
4221	12.7	0.15	0.01	38.31	4271	11.9	0.15	0.01	55.41
4222	12.2	0.15	0.01	48.31	4272	13.4	0.15	0.01	27.81
4223	11.6	0.15	0.01	63.61	4273	14.5	0.15	0.01	16.71
4224	11.0	0.15	0.01	83.91	4274	12.6	0.15	0.01	40.11
4225	13.2	0.15	0.01	30.51	4275	14.4	0.15	0.01	17.51
4226	11.6	0.15	0.01	63.61	4276	14.3	0.15	0.01	18.31
4227	13.5	0.15	0.01	26.51	4277	12.8	0.15	0.01	36.61
4228	13.8	0.15	0.01	23.11	4278	13.8	0.15	0.01	23.11
4229	12.8	0.15	0.01	36.61	4279	14.4	0.15	0.01	17.51
4230	11.9	0.15	0.01	55.41	4280	13.2	0.15	0.01	30.51
4231	13.1	0.15	0.01	31.91	4281	13.4	0.15	0.01	27.81
4232	13.3	0.15	0.01	29.11	4282	13.0	0.15	0.01	33.41
4233	13.8	0.15	0.01	23.11	4283	12.7	0.15	0.01	38.31
4234	12.4	0.15	0.01	44.01	4284	12.0	0.15	0.01	52.91
4235	12.3	0.15	0.01	46.11	4285	12.3	0.15	0.01	46.11
4236	11.3	0.15	0.01	73.01	4286	11.5	0.15	0.01	66.61
4237	13.0	0.15	0.01	33.41	4287	13.0	0.15	0.01	33.41
4238	13.6	0.15	0.01	25.31	4288	11.8	0.15	0.01	58.01
4239	14.2	0.15	0.01	19.21	4289	12.4	0.15	0.01	44.01
4240	13.2	0.15	0.01	30.51	4290	11.6	0.15	0.01	63.61
4241	15.2	0.15	0.01	12.11	4291	11.5	0.15	0.01	66.61
4242	12.8	0.15	0.01	36.61	4292	11.9	0.15	0.01	55.41
4243	12.5	0.15	0.01	42.01	4293	12.0	0.15	0.01	52.91
4244	12.2	0.15	0.01	48.31	4294	12.8	0.15	0.01	36.61
4245	13.7	0.15	0.01	24.21	4295	13.5	0.15	0.01	26.51
4246	13.6	0.15	0.01	25.31	4296	13.3	0.15	0.01	29.11
4247	13.0	0.15	0.01	33.41	4297	12.6	0.15	0.01	40.11
4248	14.2	0.15	0.01	19.21	4298	12.2	0.15	0.01	48.31
4249	11.9	0.15	0.01	55.41	4299	13.3	0.15	0.01	29.11
4250	11.9	0.15	0.01	55.41	4300	13.3	0.15	0.01	29.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
4301	12.3	0.15	0.01	46.11	4351	12.6	0.15	0.01	40.11
4302	12.5	0.15	0.01	42.01	4352	11.0	0.15	0.01	83.91
4303	14.1	0.15	0.01	20.11	4353	12.1	0.15	0.01	50.51
4304	13.7	0.15	0.01	24.21	4354	13.3	0.15	0.01	29.11
4305	12.0	0.15	0.01	52.91	4355	12.7	0.15	0.01	38.31
4306	12.2	0.15	0.01	48.31	4356	13.1	0.15	0.01	31.91
4307	13.0	0.15	0.01	33.41	4357	11.6	0.15	0.01	63.61
4308	12.3	0.15	0.01	46.11	4358	12.2	0.15	0.01	48.31
4309	13.0	0.15	0.01	33.41	4359	13.5	0.15	0.01	26.51
4310	13.6	0.15	0.01	25.31	4360	12.8	0.15	0.01	36.61
4311	13.6	0.15	0.01	25.31	4361	12.3	0.15	0.01	46.11
4312	13.1	0.15	0.01	31.91	4362	12.6	0.15	0.01	40.11
4313	12.8	0.15	0.01	36.61	4363	13.2	0.15	0.01	30.51
4314	13.2	0.15	0.014	25.81	4364	14.2	0.15	0.01	19.21
4315	12.4	0.15	0.01	44.01	4365	12.6	0.15	0.01	40.11
4316	12.1	0.15	0.01	50.51	4366	12.2	0.15	0.01	48.31
4317	10.3	0.15	0.01	115.81	4367	12.2	0.15	0.01	48.31
4318	11.6	0.15	0.01	63.61	4368	11.4	0.15	0.01	69.81
4319	13.7	0.15	0.01	24.21	4369	11.7	0.15	0.01	60.81
4320	15.6	0.15	0.01	10.11	4370	14.6	0.15	0.01	16.01
4321	13.0	0.15	0.01	33.41	4371	13.3	0.15	0.01	29.11
4322	14.3	0.15	0.01	18.31	4372	12.9	0.15	0.01	35.01
4323	13.6	0.15	0.01	25.31	4373	13.8	0.15	0.01	23.11
4324	12.2	0.15	0.01	48.31	4374	12.9	0.15	0.01	35.01
4325	12.5	0.15	0.01	42.01	4375	12.6	0.15	0.01	40.11
4326	12.5	0.15	0.01	42.01	4376	13.5	0.15	0.01	26.51
4327	12.7	0.15	0.01	38.31	4377	13.2	0.15	0.01	30.51
4328	14.0	0.15	0.01	21.11	4378	10.8	0.15	0.01	92.01
4329	13.6	0.15	0.01	25.31	4379	11.8	0.15	0.01	58.01
4330	13.6	0.15	0.01	25.31	4380	11.8	0.15	0.01	58.01
4331	13.7	0.15	0.01	24.21	4381	11.4	0.15	0.01	69.81
4332	11.9	0.15	0.01	55.41	4382	12.2	0.15	0.01	48.31
4333	13.9	0.15	0.01	22.11	4383	13.0	0.15	0.01	33.41
4334	12.8	0.15	0.01	36.61	4384	12.1	0.15	0.01	50.51
4335	13.5	0.15	0.01	26.51	4385	12.0	0.15	0.01	52.91
4336	13.5	0.15	0.01	26.51	4386	12.8	0.15	0.01	36.61
4337	11.9	0.15	0.01	55.41	4387	13.0	0.15	0.01	33.41
4338	13.8	0.15	0.01	23.11	4388	13.4	0.15	0.01	27.81
4339	13.7	0.15	0.01	24.21	4389	12.2	0.15	0.01	48.31
4340	13.4	0.15	0.01	27.81	4390	13.4	0.15	0.01	27.81
4341	15.6	0.15	0.01	10.11	4391	13.5	0.15	0.01	26.51
4342	12.3	0.15	0.01	46.11	4392	14.0	0.15	0.01	21.11
4343	11.8	0.15	0.01	58.01	4393	12.5	0.15	0.01	42.01
4344	12.5	0.15	0.01	42.01	4394	15.3	0.15	0.01	11.61
4345	12.4	0.15	0.01	44.01	4395	12.3	0.15	0.01	46.11
4346	12.2	0.15	0.01	48.31	4396	13.7	0.15	0.01	24.21
4347	11.9	0.15	0.01	55.41	4397	13.8	0.15	0.01	23.11
4348	9.1	0.15	0.01	201.21	4398	12.9	0.15	0.01	35.01
4349	11.8	0.15	0.01	58.01	4399	12.4	0.15	0.01	44.01
4350	12.0	0.15	0.01	52.91	4400	13.8	0.15	0.01	23.11

ID/1 No.	H	G	Input p.	Input D	ID/1 No.	H	G	Input p.	Input D
4401	15.9	0.15	0.01	8.81	4451	12.5	0.15	0.01	42.01
4402	11.7	0.15	0.01	60.81	4452	11.9	0.15	0.01	55.41
4403	13.7	0.15	0.01	24.21	4453	11.5	0.15	0.01	66.61
4404	12.8	0.15	0.01	36.61	4454	12.0	0.15	0.01	52.91
4405	10.7	0.15	0.01	96.31	4455	11.0	0.15	0.01	83.91
4406	13.2	0.15	0.01	30.51	4456	13.5	0.15	0.01	26.51
4407	12.0	0.15	0.01	52.91	4457	12.2	0.15	0.01	48.31
4408	12.8	0.15	0.01	36.61	4458	13.5	0.15	0.01	26.51
4409	12.4	0.15	0.01	44.01	4459	13.3	0.15	0.01	29.11
4410	11.5	0.15	0.01	66.61	4460	10.8	0.15	0.01	92.01
4411	13.8	0.15	0.01	23.11	4461	11.7	0.15	0.01	60.81
4412	12.7	0.15	0.01	38.31	4462	11.8	0.15	0.01	58.01
4413	13.6	0.15	0.01	25.31	4463	12.6	0.15	0.01	40.11
4414	14.0	0.15	0.01	21.11	4464	14.0	0.15	0.01	21.11
4415	15.1	0.15	0.01	12.71	4465	13.4	0.15	0.01	27.81
4416	15.2	0.15	0.01	12.11	4466	12.0	0.15	0.01	52.91
4417	11.5	0.15	0.01	66.61	4467	11.8	0.15	0.01	58.01
4418	12.5	0.15	0.01	42.01	4468	14.2	0.15	0.01	19.21
4419	13.0	0.15	0.01	33.41	4469	13.8	0.15	0.01	23.11
4420	12.1	0.15	0.01	50.51	4470	12.0	0.15	0.01	52.91
4421	12.71	0.15	0.01	38.21	4471	12.4	0.15	0.01	44.01
4422	12.9	0.15	0.01	35.01	4472	13.7	0.15	0.01	24.21
4423	11.2	0.15	0.01	76.51	4473	12.8	0.15	0.01	36.61
4424	11.5	0.15	0.01	66.61	4474	12.7	0.15	0.01	38.31
4425	13.9	0.15	0.01	22.11	4475	13.6	0.15	0.01	25.31
4426	12.3	0.15	0.01	46.11	4476	13.8	0.15	0.01	23.11
4427	11.9	0.15	0.01	55.41	4477	14.1	0.15	0.01	20.11
4428	13.0	0.15	0.01	33.41	4478	14.1	0.15	0.01	20.11
4429	14.5	0.15	0.01	16.71	4479	12.1	0.15	0.01	50.51
4430	12.4	0.15	0.01	44.01	4480	13.7	0.15	0.01	24.21
4431	11.2	0.15	0.01	76.51	4481	14.2	0.15	0.01	19.21
4432	14.8	0.15	0.01	14.61	4482	12.9	0.15	0.01	35.01
4433	12.9	0.15	0.01	35.01	4483	11.9	0.15	0.01	55.41
4434	13.2	0.15	0.01	30.51	4484	12.2	0.15	0.01	48.31
4435	13.2	0.15	0.01	30.51	4485	11.8	0.15	0.01	58.01
4436	11.1	0.15	0.01	80.11	4486	15.4	0.15	0.01	11.11
4437	12.6	0.15	0.01	40.11	4487	17.6	0.15	0.01	4.01
4438	11.4	0.15	0.01	69.81	4488	13.9	0.15	0.01	22.11
4439	13.2	0.15	0.01	30.51	4489	9.0	0.15	0.01	210.71
4440	12.5	0.15	0.01	42.01	4490	12.7	0.15	0.01	38.31
4441	13.2	0.15	0.01	30.51	4491	12.8	0.15	0.01	36.61
4442	12.4	0.15	0.01	44.01	4492	12.9	0.15	0.01	35.01
4443	13.4	0.15	0.01	27.81	4493	11.0	0.15	0.01	83.91
4444	13.0	0.15	0.01	33.41	4494	12.6	0.15	0.01	40.11
4445	14.0	0.15	0.01	21.11	4495	11.3	0.15	0.01	73.01
4446	11.1	0.15	0.01	80.11	4496	12.7	0.15	0.01	38.31
4447	12.7	0.15	0.01	38.31	4497	11.5	0.15	0.01	66.61
4448	11.9	0.15	0.01	55.41	4498	11.3	0.15	0.01	73.01
4449	11.2	0.15	0.01	76.51	4499	12.2	0.15	0.01	48.31
4450	17.1	0.15	0.01	5.11	4500	12.0	0.15	0.01	52.91

ID/1 No.	H	G	Input p.	Input D
4501	10.5	0.15	0.01	105.61
4502	11.6	0.15	0.01	63.61
4503	15.9	0.15	0.01	8.81
4504	13.1	0.15	0.01	31.91
4505	11.3	0.15	0.01	73.01
4506	12.2	0.15	0.01	48.31
4507	11.6	0.15	0.01	63.61
4508	13.0	0.15	0.01	33.41
4509	12.0	0.15	0.01	52.91
4510	13.0	0.15	0.01	33.41
4511	12.1	0.15	0.01	50.51
4512	11.7	0.15	0.01	60.81
4513	11.6	0.15	0.01	63.61
4514	13.4	0.15	0.01	27.81
4515	13.2	0.15	0.01	30.51
4516	12.4	0.15	0.01	44.01
4517	13.4	0.15	0.01	27.81
4518	13.7	0.15	0.01	24.21
4519	13.3	0.15	0.01	29.11
4520	12.8	0.15	0.01	36.61
4521	11.4	0.15	0.01	69.81
4522	11.6	0.15	0.01	63.61
4523	12.2	0.15	0.01	48.31
4524	13.1	0.15	0.01	31.91
4525	12.7	0.15	0.01	38.31
4526	12.5	0.15	0.01	42.01
4527	14.0	0.15	0.01	21.11
4528	12.3	0.15	0.01	46.11
4529	11.6	0.15	0.01	63.61
4530	11.8	0.15	0.01	58.01
4531	14.9	0.15	0.01	13.91
4532	11.9	0.15	0.01	55.41
4533	12.8	0.15	0.01	36.61
4534	12.2	0.15	0.01	48.31
4535	12.5	0.15	0.01	42.01
4536	13.4	0.15	0.01	27.81
4537	11.2	0.15	0.01	76.51
4538	13.3	0.15	0.01	29.11
4539	12.3	0.15	0.01	46.11
4540	11.9	0.15	0.01	55.41
4541	12.5	0.15	0.01	42.01
4542	11.1	0.15	0.01	80.11
4543	9.8	0.15	0.01	145.71
4544	17.1	0.15	0.01	5.11
4545	11.5	0.15	0.01	66.61
4546	13.7	0.15	0.01	24.21
4547	11.2	0.15	0.01	76.51
4548	13.6	0.15	0.01	25.31
4549	13.9	0.15	0.01	22.11
4550	12.7	0.15	0.01	38.31
4551	14.0	0.15	0.01	21.11
4552	13.7	0.15	0.01	24.21
4553	12.7	0.15	0.01	38.31
4554	11.3	0.15	0.01	73.01
4555	13.7	0.15	0.01	24.21
4556	13.2	0.15	0.01	30.51
4557	11.1	0.15	0.01	80.11
4558	12.2	0.15	0.01	48.31
4559	12.2	0.15	0.01	48.31
4560	11.9	0.15	0.01	55.41
4561	13.3	0.15	0.01	29.11
4562	13.0	0.15	0.01	33.41
4563	13.4	0.15	0.01	27.81
4564	13.3	0.15	0.01	29.11
4565	13.1	0.15	0.01	31.91
4566	12.1	0.15	0.01	50.51
4567	13.2	0.15	0.01	30.51
4568	11.7	0.15	0.01	60.81
4569	11.6	0.15	0.01	63.61
4570	13.3	0.15	0.01	29.11
4571	11.8	0.15	0.01	58.01
4572	12.8	0.15	0.01	36.61
4573	11.6	0.15	0.01	63.61
4574	11.2	0.15	0.01	76.51
4575	11.2	0.15	0.01	76.51
4576	11.3	0.15	0.01	73.01
4577	12.2	0.15	0.01	48.31
4578	13.4	0.15	0.01	27.81
4579	13.7	0.15	0.01	24.21
4580	11.7	0.15	0.01	60.81
4581	20.5	0.15	0.01	1.11
4582	13.0	0.15	0.01	33.41
4583	13.0	0.15	0.01	33.41
4584	12.7	0.15	0.01	38.31
4585	13.1	0.15	0.01	31.91
4586	13.7	0.15	0.01	24.21
4587	15.4	0.15	0.01	11.11
4588	12.1	0.15	0.01	50.51
4589	13.5	0.15	0.01	26.51
4590	13.4	0.15	0.01	27.81
4591	13.8	0.15	0.01	23.11
4592	12.1	0.15	0.01	50.51
4593	11.4	0.15	0.01	69.81
4594	14.2	0.15	0.01	19.21
4595	13.0	0.15	0.01	33.41
4596	16.0	0.15	0.01	8.41
4597	12.1	0.15	0.01	50.51
4598	12.1	0.15	0.01	50.51
4599	12.6	0.15	0.01	40.11
4600	11.6	0.15	0.01	63.61

ID/1 No.	H	G	Input p.	Input D
4601	12.5	0.15	0.01	42.01
4602	12.4	0.15	0.01	44.01
4603	11.9	0.15	0.01	55.41
4604	14.0	0.15	0.01	21.11
4605	13.3	0.15	0.01	29.11
4606	12.7	0.15	0.01	38.31
4607	12.2	0.15	0.01	48.31
4608	12.8	0.15	0.01	36.61
4609	11.5	0.15	0.01	66.61
4610	13.0	0.15	0.01	33.41
4611	12.1	0.15	0.01	50.51
4612	12.3	0.15	0.01	46.11
4613	11.8	0.15	0.01	58.01
4614	12.9	0.15	0.01	35.01
4615	12.4	0.15	0.01	44.01
4616	12.3	0.15	0.01	46.11
4617	11.2	0.15	0.01	76.51
4618	12.8	0.15	0.01	36.61
4619	12.4	0.15	0.01	44.01
4620	13.5	0.15	0.01	26.51
4621	13.4	0.15	0.01	27.81
4622	12.2	0.15	0.01	48.31
4623	12.9	0.15	0.01	35.01
4624	12.5	0.15	0.01	42.01
4625	13.4	0.15	0.01	27.81
4626	12.7	0.15	0.01	38.31
4627	12.1	0.15	0.01	50.51
4628	11.0	0.15	0.01	83.91
4629	12.8	0.15	0.01	36.61
4630	13.4	0.15	0.01	27.81
4631	12.9	0.15	0.01	35.01
4632	13.6	0.15	0.01	25.31
4633	12.6	0.15	0.01	40.11
4634	13.1	0.15	0.01	31.91
4635	12.5	0.15	0.01	42.01
4636	12.7	0.15	0.01	38.31
4637	13.0	0.15	0.01	33.41
4638	13.5	0.15	0.01	26.51
4639	13.0	0.15	0.01	33.41
4640	13.2	0.15	0.01	30.51
4641	13.7	0.15	0.01	24.21
4642	11.9	0.15	0.01	55.41
4643	13.5	0.15	0.01	26.51
4644	12.3	0.15	0.01	46.11
4645	12.4	0.15	0.01	44.01
4646	14.0	0.15	0.01	21.11
4647	12.7	0.15	0.01	38.31
4648	13.0	0.15	0.01	33.41
4649	11.5	0.15	0.01	66.61
4650	13.7	0.15	0.01	24.21
4651	12.6	0.15	0.01	40.11
4652	13.3	0.15	0.01	29.11
4653	12.9	0.15	0.01	35.01
4654	13.4	0.15	0.01	27.81
4655	13.5	0.15	0.01	26.51
4656	12.5	0.15	0.01	42.01
4657	11.9	0.15	0.01	55.41
4658	12.5	0.15	0.011	36.11
4659	14.4	0.15	0.01	17.51
4660	18.2	0.15	0.01	3.01
4661	12.8	0.15	0.01	36.61
4662	11.9	0.15	0.01	55.41
4663	11.8	0.15	0.01	58.01
4664	12.5	0.15	0.01	42.01
4665	12.0	0.15	0.01	52.91
4666	13.4	0.15	0.01	27.81
4667	12.5	0.15	0.01	42.01
4668	11.6	0.15	0.01	63.61
4669	13.8	0.15	0.01	23.11
4670	13.3	0.15	0.01	29.11
4671	12.9	0.15	0.01	35.01
4672	10.7	0.15	0.01	96.31
4673	11.8	0.15	0.01	58.01
4674	13.3	0.15	0.01	29.11
4675	12.8	0.15	0.01	36.61
4676	12.4	0.15	0.01	44.01
4677	12.2	0.15	0.01	48.31
4678	13.4	0.15	0.01	27.81
4679	11.7	0.15	0.01	60.81

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1	A09TF 43VB	12.00	52.91	51	53UD 87SM	12.40	44.01
2	A19SD 29RS	13.00	33.41	52	53VX1 53XE	13.40	27.81
3	25BA 72YV	11.50	66.61	53	55EH 77CB1	13.00	33.41
4	27TC 90JA	14.40	17.51	54	55QN 55RC	13.00	33.41
5	28RB 69PS	13.10	31.91	55	55SF 55TK	14.91	13.91
6	29PB 29PD	14.36	17.81	56	61BC 61CE	13.00	33.41
7	29TD1 78SR5	15.00	13.31	57	62SR 87SX20	12.40	44.01
8	29VS 80TC4	14.90	13.91	58	64TA2 71VP	12.90	35.01
9	31FC 83RE8	13.45	27.11	59	64TU2 83CP4	14.40	17.51
10	31TS1 81UX15	11.90	55.41	60	64UP 86RH	13.87	22.41
11	31TC2 77DQ1	12.90	35.01	61	64VT1 80EQ1	12.90	35.01
12	31TE4 69TM3	14.40	17.51	62	64YJ 72LP	11.50	66.61
13	31UB 80QC	13.90	22.11	63	65SO 88TT2	12.90	35.01
14	31UD 86PR5	12.85	35.81	64	65UA 79RU	14.10	20.11
15	31VS 31XH	12.90	35.01	65	66CF 73AL3	12.40	44.01
16	32CY 77KW1	11.90	55.41	66	66CL 77DX	13.88	22.31
17	33FE1 64DH	14.50	16.71	67	66CM 85QH6	12.70	38.31
18	33SD 72TK2	14.36	17.81	68	66PK 82SB4	12.90	35.01
19	33UM1 71QD	12.40	44.01	69	67DA 88DF	12.40	44.01
20	34GA 34GB	10.90	87.81	70	67GM1 82BG5	12.28	46.51
21	35SC 55QB1	13.90	22.11	71	67JP 66CU	12.90	35.01
22	36NB 850B	11.90	55.41	72	67KB 88TD1	12.90	35.01
23	36QV 81SM5	13.80	23.11	73	67UT 74VT2	13.50	26.51
24	36QE1 86RU1	12.77	37.11	74	680F 89TF	13.90	22.11
25	37QC 37TV	14.19	19.31	75	680H 86WF5	12.90	35.01
26	37TB 81XS1	12.90	35.01	76	680A1 88CE5	13.90	22.11
27	38HA 80E	11.45	68.21	77	68QE 72TU4	13.90	22.11
28	39UB 73UZ1	12.00	52.91	78	69GD 88XF2	11.92	54.91
29	39VD 66UE	13.10	31.91	79	69LB 76SP2	11.90	55.41
30	40ED 83JH	13.90	22.11	80	69QR 88DP	14.20	19.21
31	40GO 57GC	11.50	66.61	81	69TL1 31TQ4	12.30	46.11
32	41UN 84CT	12.10	50.51	82	69TQ1 86WD2	12.80	36.61
33	42RJ 85TS3	13.90	22.11	83	69TR1 86TA	13.90	22.11
34	43DL 64FF	12.40	44.01	84	69TT1 84UE1	13.90	22.11
35	43EN 73FW	12.90	35.01	85	69TC2 77DA11	11.73	59.91
36	48AA 89YW6	14.50	16.71	86	69TJ2 85RD6	12.96	34.01
37	48AG 64BD	14.90	13.91	87	69TB3 87SS	13.40	27.81
38	48KF 83HP	14.07	20.41	88	69TN4 73YA2	13.40	27.81
39	49PQ 77DW10	14.23	18.91	89	69TX5 81UE21	11.40	69.81
40	49QL 49QZ	13.48	26.81	90	69UP1 69VO	14.00	21.11
41	49QC1 69TE4	13.90	22.11	91	700B 87ND	14.90	13.91
42	49QQ1 80RE4	11.90	55.41	92	700F A17SC	13.42	27.51
43	49SA1 49SD	13.50	26.51	93	70PS 38QM	11.90	55.41
44	50DE 50BL1	11.30	73.01	94	70WD 89AD1	13.40	27.81
45	50HJ 76FD	12.01	52.71	95	71BD3 71DF	12.80	36.61
46	51SY	14.90	13.91	96	710V 71QM	14.70	15.31
47	51WH 51UG	13.40	27.81	97	71QN 78WQ13	14.12	19.91
48	52QW 52SL	14.80	14.61	98	71QR1 88VX1	13.90	22.11
49	53PR 53QF	14.23	18.91	99	71RA 71SO2	14.40	17.51
50	53TS2 82BK10	13.40	27.81	100	71SS1 82SY	12.30	46.11

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
101	71SN2 83XT	11.90	55.41	151	73UE5 LU114	14.25	18.81
102	71SX3 71TA1	12.60	40.11	152	73UJ5 88XZ1	12.39	44.21
103	71TF 86PA5	13.63	25.01	153	74FJ 74HT	14.00	21.11
104	71UK 82US10	14.24	18.91	154	74FO 74HL1	13.20	30.51
105	71UM 90VB3	13.50	26.51	155	74ME 29WT	11.30	73.01
106	71UN 90SR	13.40	27.81	156	74MG 81SE3	14.30	18.31
107	71UQ 77KC2	14.90	13.91	157	74OE 78TR6	13.90	22.11
108	71UD1 84SU4	14.32	18.21	158	74QU1 83YC	13.22	30.21
109	71UN1 82SX10	12.90	35.01	159	74QX1 31RT	14.30	18.31
110	71US1 58TO1	13.40	27.81	160	74QM2 74RT	14.67	15.51
111	71UT1 76QJ	12.78	36.91	161	74SF 85UC2	14.90	13.91
112	72AU 70QE1	12.90	35.01	162	74ST 80VE	12.41	43.81
113	72GL 72JR1	13.37	28.21	163	74SW 78NY1	13.40	27.81
114	72HL 5059T2	12.28	46.51	164	74SP1 77EV3	12.90	35.01
115	72HR 62QA	11.83	57.21	165	74SR1 33UG1	13.71	24.11
116	72JJ 79UH1	12.10	50.51	166	74SX1 81WP4	13.57	25.71
117	72KL 68HO1	13.40	27.81	167	74SD3 86RN	11.40	69.81
118	72RB	18.90	2.21	168	74SJ3 79SY10	12.10	50.51
119	72RF 87QE	13.48	26.81	169	74SB5 85TK1	12.36	44.81
120	72RF2 79SN10	15.01	13.21	170	74VG 76DV	11.86	56.41
121	72RU3 82UF6	14.40	17.51	171	74VS 77HC1	11.90	55.41
122	72TE 59RU	13.90	22.11	172	74WB	14.90	13.91
123	72TF 62WW	14.03	20.81	173	74XT 88PB	13.90	22.11
124	72TW3 72RH2	13.95	21.61	174	75AN 75AX	13.00	33.41
125	73EK 77AA1	12.62	39.81	175	75DB 79BN	12.40	44.01
126	73NA	14.30	18.31	176	75LQ 87SO11	13.90	22.11
127	73QG2 73SF5	12.40	44.01	177	75QC 86RV1	13.87	22.41
128	73RF 73UQ	13.40	27.81	178	75RP 64VU	11.90	55.41
129	73ST 88RF10	12.61	40.01	179	U181 75SJ	12.50	42.01
130	73SY 90EP	10.40	110.61	180	75SS 78GZ1	12.37	44.61
131	73SH1 90DG3	9.90	139.21	181	U179 75SA1	12.40	44.01
132	73SJ1 78JR3	11.90	55.41	182	U206 75SZ1	15.90	8.81
133	73SK1 89ST5	11.40	69.81	183	75TE 75TF2	14.40	17.51
134	73SM1 90ED2	11.30	73.01	184	75TM2 75VQ	13.90	22.11
135	73SQ1 89AO2	9.90	139.21	185	75TX2 79WY7	13.10	31.91
136	73SR1 51YL	10.40	110.61	186	75TQ3 88VO6	12.40	44.01
137	73SW1 89CJ2	10.40	110.61	187	75TS3 75UG	11.90	55.41
138	73SA2 77AY2	11.40	69.81	188	75TR4 88UL	12.04	52.01
139	73SO3 79FK3	14.19	19.31	189	75TC6 58GF	12.90	35.01
140	73SR3 31TK1	13.90	22.11	190	75TH6 88KD	12.90	35.01
141	73ST3 73UJ	14.90	13.91	191	75TK6 77AS1	12.90	35.01
142	73SG4 73US3	12.90	35.01	192	75UE 86PB4	14.30	18.31
143	73SO4 73UG4	13.99	21.21	193	75UF 86RC3	13.00	33.41
144	73SB6 88RU5	14.50	16.71	194	75VD 82RD2	14.34	18.01
145	73SC6 55SM2	12.90	35.01	195	75VP 75VH10	13.86	22.51
146	73SF6 83UK	14.40	17.51	196	75VK2 75WY1	13.40	27.81
147	73SR6 73UA3	13.90	22.11	197	75VV2 80PD3	13.21	30.31
148	73TP 73UG3	12.40	44.01	198	75VS5 75XM4	14.00	21.11
149	73UC 86RK16	13.90	22.11	199	75VD9 54ET	11.40	69.81
150	73UB5 62WG2	11.80	58.01	200	75XF 89TL2	14.90	13.91

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
201	75XH 79YK7	14.08	20.31	251	77DY8 78NJ5	14.20	19.21
202	75XJ 87BF2	14.02	20.91	252	77EL 75UQ	13.70	24.21
203	75XP3 75VM6	13.75	23.61	253	77EO 70AM	13.40	27.81
204	75YD 89GA2	13.40	27.81	254	77EV 89CD2	11.80	58.01
205	75YE 79SN5	12.22	47.81	255	77EF1 90LB	13.40	27.81
206	76DC	16.40	7.01	256	77EK1 84FU1	14.40	17.51
207	76EB A24SB	12.90	35.01	257	77EO1 72HF	12.80	36.61
208	76GJ1 87FY1	11.90	55.41	258	77EL5 77DD	12.90	35.01
209	76GD2 86EC2	13.87	22.41	259	77EM5 86RK3	14.20	19.21
210	76GH2 82KL2	11.90	55.41	260	77EG7 85PQ1	14.40	17.51
211	76GN2 76HB	12.94	34.31	261	77EH7 70EC	14.70	15.31
212	76GR2 60FB	13.90	22.11	262	77FT 88JK	14.26	18.71
213	76GO3 81NX	13.20	30.51	263	77FN1 82DB1	11.76	59.11
214	76GU3 78TM9	12.40	44.01	264	77JD 78TU2	13.70	24.21
215	76GX3 87QB10	12.71	38.21	265	B1420 77KL1	11.50	66.61
216	76GM7 78RX16	11.71	60.51	266	77NN 77PX	13.77	23.41
217	76QN 88FC3	14.58	16.11	267	77PE1 82UR5	13.34	28.51
218	76QC1 76SW10	14.90	13.91	268	77PO1 86XN3	10.40	110.61
219	76QE1 68DA1	10.90	87.81	269	77QY 55QQ1	11.90	55.41
220	76QZ1 76SN10	13.70	24.21	270	77QF1 90QH	12.52	41.61
221	76QL2 88TS2	12.40	44.01	271	77QK1 77RW2	13.90	22.11
222	76SA 81WC8	13.20	30.51	272	77QD2 77TP2	14.40	17.51
223	76SJ 87RJ1	13.90	22.11	273	77QU2 85RO6	13.01	33.21
224	76SG2 79OP16	13.90	22.11	274	77QD3 86TA7	13.36	28.31
225	76SM2 79OQ15	13.98	21.31	275	77QH4 77TR	13.42	27.51
226	76SW3 87SW12	12.40	44.01	276	77RG	13.40	27.81
227	76SA6 76UT8	14.00	21.11	277	77RK 90HM	13.90	22.11
228	76SZ9 82TX1	12.83	36.11	278	77RL 88VP1	12.90	35.01
229	76SV10 76UA3	12.72	38.01	279	77RD2 82SP5	12.40	44.01
230	76US1 49GF	12.90	35.01	280	77RF2 30UB1	14.40	17.51
231	76UB2 86VL2	12.40	44.01	281	77RD3 87UA5	14.02	20.91
232	76UP2 76WX	15.30	11.61	282	77RR6 76JN9	13.90	22.11
233	76UG15 76WR	14.90	13.91	283	77RW6 75EP5	12.49	42.21
234	76UR15 89VU	14.00	21.11	284	77RY6 86RH5	13.40	27.81
235	76UH16 76ST5	11.90	55.41	285	77RD7 72EO	13.35	28.41
236	76WC 88FH	13.95	21.61	286	77RL7 90SL1	13.40	27.81
237	76WC1 68HD1	12.40	44.01	287	77RR7 81JN1	12.35	45.01
238	76YY 53TX1	14.40	17.51	288	77RZ8 87SS19	12.50	42.01
239	76YP1	12.22	47.81	289	77SG3 67UP	13.40	27.81
240	76YF5 83VO2	13.40	27.81	290	77TC1 77TB5	14.40	17.51
241	77AL1 75VD10	12.60	40.11	291	77TD1 90UH3	12.30	46.11
242	77AZ1 79MN	11.40	69.81	292	77TS3 77VN1	11.90	55.41
243	B1384 77DB1	15.00	13.31	293	77TQ6 86WZ10	13.58	25.61
244	77DD1 51CJ	13.89	22.21	294	77UD 81WL4	13.90	22.11
245	77DR1 73GE1	12.57	40.71	295	77UP	14.25	18.81
246	77DS2 88BV3	12.28	46.51	296	77VA	19.40	1.81
247	77DL3 72XZ	14.40	17.51	297	78CA	17.90	3.51
248	77DQ3 75VL4	13.10	31.91	298	78GJ 78JK3	13.37	28.21
249	77DN4 75WS	12.80	36.61	299	78NS 78SO1	13.70	24.21
250	77DS4 89UX6	13.10	31.91	300	78NN1 83PD	13.50	26.51

ID/2 No.	Provisional Designation	H	Input D
301	78NQ1 78OC	14.40	17.51
302	78NU3 78OH	14.49	16.81
303	B1468 78NY7	12.82	36.31
304	78ON 77HT	11.90	55.41
305	78OP 82KR1	14.00	21.11
306	78PJ2 78RZ10	12.50	42.01
307	78PV2 78RY2	13.90	22.11
308	78PX2 78SF4	14.40	17.51
309	78PY2 77KZ1	12.88	35.31
310	78PD3 78RZ2	13.90	22.11
311	78PO3 86UN	13.38	28.01
312	78PW3 86TU3	13.90	22.11
313	78PX3 88PR3	15.00	13.31
314	78PT4 86LL	12.28	46.51
315	78QA2 85RN	14.90	13.91
316	78QG2 88RZ6	13.90	22.11
317	78QC3 90DN	11.40	69.81
318	78RN 69RK1	13.60	25.31
319	78RR 88VH6	13.40	27.81
320	78RU 85DT3	13.90	22.11
321	78RW 77KO1	12.31	45.91
322	78RZ 77LH1	12.90	35.01
323	78RG1 77KX1	12.90	35.01
324	78RH1 78TM1	13.68	24.41
325	78RJ1 78SO1	13.60	25.31
326	78RK1 77LQ	12.90	35.01
327	78RL1 77LU	12.85	35.81
328	78RX1 88PJ2	15.02	13.21
329	78RM2 85DB2	12.92	34.61
330	78RE3 86WQ10	15.30	11.61
331	78RN5 6198PL	13.67	24.51
332	78RV5 88RS	13.45	27.11
333	78RC9 78RD12	14.57	16.21
334	78RZ9 78RM16	13.80	23.11
335	78RD10 81EC36	13.20	30.51
336	78SE1 82SR	13.67	24.51
337	78SH1 51WJ	14.10	20.11
338	78SS2 82HA1	11.72	60.21
339	78SB3 74QH2	13.40	27.81
340	78SE3 81JY2	13.60	25.31
341	78SH3 88TD2	14.40	17.51
342	78SN4 49OR	11.90	55.41
343	78SQ4 78RT5	14.40	17.51
344	78SM5 80BC6	12.90	35.01
345	78SP5 87QK12	12.90	35.01
346	78SS5 82UZ3	13.90	22.11
347	78SU5 41CJ	14.40	17.51
348	78SL6 78UN	14.03	20.81
349	78SP6 78TX2	12.43	43.41
350	78SD7 88TM	13.90	22.11
351	78SN7 89WS1	11.90	55.41
352	78SS7 89XK	14.15	19.71
353	78ST7 82YZ4	13.70	24.21
354	78SV7 90EM5	12.40	44.01
355	78SB8 77HP	14.90	13.91
356	78TB2 78TQ4	13.83	22.81
357	78TP2 78VF12	14.40	17.51
358	78TR2 83VL1	12.90	35.01
359	78TT2 76GA8	12.29	46.31
360	78TW2 78VN12	13.75	23.61
361	78TP6 84WN1	12.53	41.51
362	78TA7 76JR2	11.90	55.41
363	78TO8 83RU	12.90	35.01
364	78TV8 84YG4	12.59	40.31
365	78UV 88BD	12.90	35.01
366	78UL2 61UQ	12.40	44.01
367	78VZ2 78WV8	14.40	17.51
368	78VK3 88AX3	14.40	17.51
369	78VX3 71DF1	14.50	16.71
370	78VR4 89EX4	13.90	22.11
371	78VT4 88RF11	13.80	23.11
372	78VD5 80FR8	14.40	17.51
373	78VE5 70AG	12.40	44.01
374	78VG5 88TZ4	12.80	36.61
375	78VL5 74OM	13.90	22.11
376	78VS5 38DQ1	13.40	27.81
377	78VC6 82TG3	14.50	16.71
378	78VF6 89YL7	15.90	8.81
379	78VV6	15.90	8.81
380	78VW6 82XQ	14.67	15.51
381	78VD7 87SZ9	14.40	17.51
382	78VZ7 81EU31	14.40	17.51
383	78VG8 82XR1	15.03	13.11
384	78VJ8 88TY4	13.40	27.81
385	78VK8 87SQ9	14.58	16.11
386	78VR8 90HX	15.40	11.11
387	78VT9	16.40	7.01
388	78VG10 77RO1	12.10	50.51
389	78VP10 89SE1	14.50	16.71
390	78VT10 77LF	15.40	11.11
391	78VU10 71UL	15.50	10.61
392	78VG11 69TE1	14.70	15.31
393	78VL11 87DR5	12.90	35.01
394	78VP11 89VN	12.43	43.41
395	78VY14 86QJ3	12.90	35.01
396	U113 78VE15	13.90	22.11
397	78WC 52UH	14.40	17.51
398	78XQ 86EG2	11.90	55.41
399	T2 79EL	12.00	52.91
400	79FD2 88RL3	13.81	23.01

ID/2 No.	Provisional Designation	H	Input D
401	79FQ2 82YB3	11.90	55.41
402	79FA3 90HJ1	11.40	69.81
403	79FD3 79HE2	14.23	18.91
404	79HE3 49GE	14.40	17.51
405	79HE5 85DK	13.90	22.11
406	79HW6 82DZ4	14.40	17.51
407	79KD 87HJ	13.40	27.81
408	79KG 86CJ2	12.40	44.01
409	79KO 71BC1	11.40	69.81
410	79KQ 76SQ3	13.90	22.11
411	79KR 72TZ2	12.90	35.01
412	79KO1 83NA1	14.40	17.51
413	79ML 71OS	13.40	27.81
414	79MP1 87SK6	14.90	13.91
415	79MW1 87KC3 U	13.90	22.11
416	79MB2 79OF1	13.90	22.11
417	79MU2	14.90	13.91
418	79MW2 90QL8	14.00	21.11
419	79MZ2 84UQ4	13.70	24.21
420	79MK3 88CX	13.40	27.81
421	79MP3 78FC	15.19	12.21
422	79MR3	14.90	13.91
423	79MA4 86TJ7	12.90	35.01
424	79MJ5 88BQ3	13.90	22.11
425	79ML5 79OR11	15.90	8.81
426	79MM5	14.24	18.91
427	79MR5	15.35	11.31
428	79MA6 90SX7	15.00	13.31
429	79MB6	15.23	12.01
430	79MH6 88FA1	14.70	15.31
431	79MR6 85DM3	16.06	8.21
432	79MS6 84YO3	13.04	32.81
433	79MX6 87UB4	13.40	27.81
434	79MK7 78JQ3	13.40	27.81
435	79ME8	14.96	13.51
436	79MM8 78EO8	14.40	17.51
437	B6 79OA	13.40	27.81
438	B4 79OB	14.47	17.01
439	79OQ5 86WK10	12.70	38.31
440	79OB9 82JC2	14.02	20.91
441	79OD15 86RY6	13.90	22.11
442	79OK15 85FP1	14.40	17.51
443	79PA 87OU	14.70	15.31
444	79QB	17.90	3.51
445	79QC1 54SH	13.87	22.41
446	79QJ1 88CC1	13.90	22.11
447	79QM1 87GH1	12.90	35.01
448	79QZ1 82DP6	12.43	43.41
449	79QC2 77EC9	13.40	27.81
450	79QW3 82FG1	13.70	24.21
451	79QK4 74WT	12.62	39.81
452	79QK6 85JQ	14.55	16.41
453	79QT8 79QO9	14.40	17.51
454	79SG 79SN	12.58	40.51
455	79SJ 86RF5	14.90	13.91
456	79SK 86VA1	14.74	15.01
457	79SS 77AA3	14.40	17.51
458	79SR2 90SU1	13.00	33.41
459	79SU2 90SL4	13.40	27.81
460	79SX2 88AG5	12.89	35.11
461	79SL7 87SC5	13.04	32.81
462	79SA8 76YZ6	13.24	29.91
463	79SD9 51WD2	12.80	36.61
464	79SJ11 51RF	11.94	54.41
465	79SU11 84QW	12.35	45.01
466	79TA 79QK9	14.02	20.91
467	79TY1 79UT1	14.40	17.51
468	79TT2 79WQ1	13.90	22.11
469	B12 79UH	13.40	27.81
470	79UQ 49YE	13.63	25.01
471	79UT 76JQ5 U	12.69	38.51
472	79UD1 84SH4	12.40	44.01
473	79VG 79SH10	13.40	27.81
474	79VN 74QT	13.00	33.41
475	79VS2 87WA1	13.90	22.11
476	79WX3 75VQ3	13.79	23.21
477	79XQ 82PP	13.73	23.91
478	79YO 88BB3	12.79	36.81
479	79YQ	13.49	26.61
480	80AA	19.40	1.81
481	80BB 79YZ8	12.18	48.71
482	80CG 78NV1	13.11	31.71
483	80DO 86PO3	11.90	55.41
484	80DX 80BA3	12.75	37.51
485	80EB 78UG4	13.90	22.11
486	80FB	12.26	46.91
487	80FU 73EP	14.18	19.41
488	80FY 78TS6	13.90	22.11
489	80FH1 90DU	12.50	42.01
490	80FJ1 76SD10	11.73	59.91
491	80FN1 78SO6	14.37	17.81
492	80FO1 73YB2	12.40	44.01
493	80FR1 83VC1	12.40	44.01
494	80FH2 78VF2	13.90	22.11
495	80FV2 90QX9	13.00	33.41
496	80FF3 4181PL	14.72	15.11
497	80FT3 78XS	14.40	17.51
498	80FZ3 83CY5	14.00	21.11
499	80FY4 74QB	14.60	16.01
500	80FH5 86QE3	13.11	31.71

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
501	80FF12 84SJ6	14.69	15.31	551	81DQ 79YR6	12.90	35.01
502	80FH12 83BV	13.40	27.81	552	81DV	14.40	17.51
503	80GO 80EP1	12.90	35.01	553	81DZ	13.49	26.61
504	80KM 86TF18	13.50	26.51	554	81DB1 72TR7	12.40	44.01
505	80LU 80KP	14.65	15.61	555	81DQ1 U	14.40	17.51
506	80LY 87UQ2	14.90	13.91	556	81DS1	14.90	13.91
507	80NB 77UJ2	13.40	27.81	557	81DX1 87SN4	14.40	17.51
508	B57 80PF	13.92	21.91	558	81DZ1	13.28	29.31
509	80PW 50TO	13.90	22.11	559	81DC2 78VY13	12.90	35.01
510	80PX 90VR1	14.30	18.31	560	81DF2	14.40	17.51
511	80PV1 75QB	13.20	30.51	561	81DX2 U	15.40	11.11
512	80PB2 69TE6	11.90	55.41	562	81DG3	11.40	69.81
513	80PB3 90FO	10.90	87.81	563	81EN 81EG35	14.40	17.51
514	80RC 89EO3	14.90	13.91	564	81EQ 89UA4	13.00	33.41
515	B79 80RJ	13.68	24.41	565	81ET 72GB1	12.40	44.01
516	B91 80RU	12.80	36.61	566	81EB1	12.90	35.01
517	80RC1 86CA2	12.83	36.11	567	81ED1 79VB1	13.40	27.81
518	80RE1 89XZ	14.10	20.11	568	81EE1 77DC	14.40	17.51
519	80RG1	15.90	8.81	569	81EG1 81EU1	13.40	27.81
520	80RO2 47UB	12.84	35.91	570	81EF2 73AO1	13.40	27.81
521	80SD 72VJ	13.07	32.31	571	81EN2	14.90	13.91
522	80SG 53RJ	13.69	24.31	572	81EH3	15.18	12.21
523	80SJ 35QM	13.57	25.71	573	81EX3	14.40	17.51
524	80SQ 90SJ1	13.87	22.41	574	81EH4	13.95	21.61
525	80TH 85PX1	12.20	48.31	575	81EK4 87QV2	13.70	24.21
526	80TM 80TX9	12.40	44.01	576	81EN4 87KR1 U	13.40	27.81
527	80TP 61UL	14.53	16.51	577	81EX4	13.05	32.61
528	80TV2 87WG	14.90	13.91	578	81EA5	14.90	13.91
529	80TH3 83GU1	12.50	42.01	579	81EF5 75VK3	14.40	17.51
530	80TX3 87BL2	13.17	30.91	580	81EJ5 75NU	14.50	16.71
531	80TE4 87BM	13.40	27.81	581	81EK5	13.90	22.11
532	80TG4 80TH15	13.10	31.91	582	81EL5 87KL2 U	14.40	17.51
533	80TS4 87SG4	14.90	13.91	583	81EM5	13.90	22.11
534	80TC5	12.69	38.51	584	81ER5	13.90	22.11
535	80TW5 88BL4	11.90	55.41	585	81ED6	15.96	8.51
536	80TB12 80VM	11.90	55.41	586	81ER6 85CT1	14.28	18.51
537	80TL13 78LP	10.87	89.01	587	81EX6	12.88	35.31
538	80UC 66FJ	12.40	44.01	588	81EA7 72TO6	15.10	12.71
539	80VA 80VL	15.00	13.31	589	81EK7 89UG7	13.90	22.11
540	B95 80VO	13.90	22.11	590	81EO7	13.72	24.01
541	80VX1 77DG	13.30	29.11	591	81ET7	15.40	11.11
542	80WF	18.40	2.81	592	81EV7	14.90	13.91
543	80XX 90WG	14.40	17.51	593	81EZ7	14.91	13.91
544	80XZ 32BE	11.06	81.61	594	81EK8	15.20	12.11
545	B137 80YB	13.67	24.51	595	81EM8	13.90	22.11
546	B138 80YC	13.55	25.91	596	81EO8 75XX2	13.60	25.31
547	B119 81CB1	13.54	26.01	597	81ES8 83RO5	12.43	43.41
548	81DE 72TG4	13.90	22.11	598	81ET8	14.40	17.51
549	81DM	14.90	13.91	599	81EU8 85BV	13.40	27.81
550	81DN	15.90	8.81	600	81EV8	15.50	10.61

ID/2 No.	Provisional Designation	H	Input D
601	81EW8	15.73	9.51
602	81EY8 83SD	13.40	27.81
603	81EA9	15.18	12.21
604	81EB9 78TG1	13.50	26.51
605	81EE9	14.00	21.11
606	81EH9	15.96	8.51
607	81EJ9	15.90	8.81
608	81EQ9	13.90	22.11
609	81ES9	13.90	22.11
610	81ET9	16.40	7.01
611	81EV9	16.40	7.01
612	81EW9	15.90	8.81
613	81EC10	14.90	13.91
614	81EK10 90VW7	15.03	13.11
615	81EL10 90EE3	14.90	13.91
616	81EP10	16.40	7.01
617	81ER10	15.40	11.11
618	81ES10	16.40	7.01
619	81EV10	16.40	7.01
620	81EX10	15.40	11.11
621	81EZ10	13.90	22.11
622	81EB11	15.40	11.11
623	81EC11	15.40	11.11
624	81ED11	16.90	5.51
625	81EE11	15.90	8.81
626	81EG11 89CP3	16.90	5.51
627	81EH11	13.90	22.11
628	81EJ11 U	15.40	11.11
629	81EO11	15.90	8.81
630	81ER11	15.90	8.81
631	81EA12	16.40	7.01
632	81EE12	15.40	11.11
633	81EF12	15.76	9.41
634	81EL12	16.90	5.51
635	81EM12	15.40	11.11
636	81EQ12	14.22	19.01
637	81EY12	14.90	13.91
638	81EC13	14.90	13.91
639	81EH13	15.40	11.11
640	81EP13 85RH1	14.42	17.41
641	81ET13	14.55	16.41
642	81EU13 90WQ1	15.50	10.61
643	81EW13	15.40	11.11
644	81EX13	12.90	35.01
645	81EC14	15.65	9.91
646	81ED14	15.28	11.71
647	81EE14	15.40	11.11
648	81EF14	15.69	9.71
649	81EO14	14.90	13.91
650	81ES14	14.90	13.91
651	81ET14	14.40	17.51
652	81EV14 U	14.40	17.51
653	81EX14	15.90	8.81
654	81EY14	15.23	12.01
655	81EZ14	14.42	17.41
656	81EB15	16.11	8.01
657	81EC15	15.90	8.81
658	81EJ15 79TV1	14.75	14.91
659	81EN15	16.40	7.01
660	81EO15 74SM4	13.90	22.11
661	81EP15	15.40	11.11
662	81ER15	15.94	8.61
663	81EU15	15.90	8.81
664	81EX15 78NH5	15.40	11.11
665	81EZ15	15.90	8.81
666	81EC16 78QP	14.07	20.41
667	81EN16	16.40	7.01
668	81EB17 77EZ5	14.87	14.11
669	81EN17	13.90	22.11
670	81ER17	12.92	34.61
671	81EV17	16.40	7.01
672	81EW17 88AU	14.90	13.91
673	81EY17	13.90	22.11
674	81EE18	14.80	14.61
675	81EP18	13.90	22.11
676	81EQ18 78RB9	13.91	22.01
677	81ER18	15.40	11.11
678	81EU18	13.07	32.31
679	81EV18	14.63	15.81
680	81EZ18	13.90	22.11
681	81ED19 87SH6	12.40	44.01
682	81EF19	15.40	11.11
683	81EJ19	13.40	27.81
684	81EO19	13.90	22.11
685	81EP19 89RF1	14.90	13.91
686	81ET19	16.40	7.01
687	81EV19	14.40	17.51
688	81EX19 63UH	14.76	14.81
689	81EY19	14.90	13.91
690	81EH20	15.40	11.11
691	81EL20	14.10	20.11
692	81EN20 76UK18	16.40	7.01
693	81EO20 89TV16	14.90	13.91
694	81ES20	14.90	13.91
695	81ET20	14.90	13.91
696	81EU20	13.90	22.11
697	81EB21	14.78	14.71
698	81EC21	14.98	13.41
699	81ED21	14.23	18.91
700	81EF21	15.40	11.11

ID/2 No.	Provisional Designation		H	Input D
701	81EL21	55KG	12.40	44.01
702	81EO21	77DB6	16.40	7.01
703	81ER21	82JE3	13.20	30.51
704	81EW21		13.40	27.81
705	81EX21	87QP	13.63	25.01
706	81EA22	78RQ11	13.90	22.11
707	81ED22		15.90	8.81
708	81EE22		15.40	11.11
709	81EJ22		14.90	13.91
710	81EK22		14.50	16.71
711	81EO22		16.90	5.51
712	81ET22	90QL7	14.50	16.71
713	81EZ22		15.40	11.11
714	81EB23	71TN	13.70	24.21
715	81EE23	U	15.40	11.11
716	81EH23		14.40	17.51
717	81EJ23		13.90	22.11
718	81EK23		14.80	14.61
719	81ET23		15.20	12.11
720	81EX23		14.90	13.91
721	81EZ23		16.10	8.01
722	81EB24		14.90	13.91
723	81ED24		14.20	19.21
724	81EG24		15.40	11.11
725	81EH24		15.20	12.11
726	81EL24		13.37	28.21
727	81EM24	88XN2	13.90	22.11
728	81ER24		15.90	8.81
729	81ET24	86WV2	14.73	15.11
730	81EV24		15.90	8.81
731	81EW24	89WO3	12.90	35.01
732	81EX24		13.70	24.21
733	81EC25		14.33	18.11
734	81ED25	75NO1	13.90	22.11
735	81EF25		15.40	11.11
736	81EJ25		16.90	5.51
737	81EK25		14.40	17.51
738	81EP25		15.40	11.11
739	81ET25	90UT3	14.50	16.71
740	81EA26		13.90	22.11
741	81EC26		16.40	7.01
742	81EK26	78RS9	15.40	11.11
743	81EM26		13.70	24.21
744	81EN26		13.24	29.91
745	81EO26		14.60	16.01
746	81EP26		13.82	22.91
747	81ET26		13.90	22.11
748	81EV26		12.99	33.51
749	81EY26		10.90	87.81
750	81EZ26	U	15.40	11.11
751	81EB27		16.40	7.01
752	81ED27	76GX6	12.82	36.31
753	81EF27		16.40	7.01
754	81EG27		15.20	12.11
755	81EO27	72NJ	14.07	20.41
756	81EP27		13.90	22.11
757	81ER27	86WA8	15.40	11.11
758	81ET27		15.11	12.61
759	81EV27		14.40	17.51
760	81EZ27	78NV6	14.33	18.11
761	81EA28	79VO1	12.80	36.61
762	81EB28	78NV	14.71	15.21
763	81ED28	9529PL	14.11	20.01
764	81EG28	68UH2	14.13	19.81
765	81EP28		14.40	17.51
766	81EV28		14.40	17.51
767	81EX28		14.60	16.01
768	81EZ28	89RV	14.80	14.61
769	81EA29		14.40	17.51
770	81EC29		15.90	8.81
771	81EE29		16.90	5.51
772	81ET29		14.40	17.51
773	81EU29	88RA10	12.69	38.51
774	81EV29		15.90	8.81
775	81EF30	90WL1	14.50	16.71
776	81EM30		13.90	22.11
777	81EX30		15.40	11.11
778	81EY30	72TH8	13.90	22.11
779	81EB31		14.50	16.71
780	81EH31		16.40	7.01
781	81EM31		15.92	8.71
782	81EQ31	90WR	14.50	16.71
783	81ER31		15.90	8.81
784	81ET31	52OB	12.30	46.11
785	81EW31	89SW1	13.90	22.11
786	81EL32		15.40	11.11
787	81EO32		15.90	8.81
788	81ES32		15.90	8.81
789	81EZ32		14.90	13.91
790	81EB33		14.40	17.51
791	81EQ33		16.40	7.01
792	81ES33	78NR6	14.90	13.91
793	81EU33		15.90	8.81
794	81EW33		15.40	11.11
795	81EZ33		14.49	16.81
796	81ED34	83VN4	15.78	9.31
797	81EH34		13.40	27.81
798	81EK34		14.90	13.91
799	81EL34	72TM3	13.40	27.81
800	81EO34	87SO1	13.72	24.01

ID/2 No.	Provisional Designation	H	Input D
801	81ED35	15.58	10.21
802	81EE35	15.40	11.11
803	81EF35	14.90	13.91
804	81EH35 90TN10	17.00	5.31
805	81EJ35	17.90	3.51
806	81EK35	14.90	13.91
807	81EO35	16.40	7.01
808	81ER35	15.40	11.11
809	81ES35	12.40	44.01
810	81EY35	14.43	17.31
811	81EB36 77DN2	16.40	7.01
812	81EG36	12.90	35.01
813	81EW36	16.40	7.01
814	81EB37	14.40	17.51
815	81ED37	14.40	17.51
816	81EF37 90MH	12.75	37.51
817	81EP37	15.90	8.81
818	81EU37	16.40	7.01
819	81EZ37	15.40	11.11
820	81EE38	15.40	11.11
821	81EM38	16.40	7.01
822	81EP38	14.90	13.91
823	81EW38 69TF7	14.90	13.91
824	81EX38	14.90	13.91
825	81EY38	14.90	13.91
826	81EA39 4118PL	16.20	7.61
827	81EG39	14.64	15.71
828	81ES39	15.90	8.81
829	81EW39	15.40	11.11
830	81EA40	14.90	13.91
831	81EJ40 88RH	14.17	19.51
832	81EM40	15.40	11.11
833	81EO40	14.90	13.91
834	81EP40	15.10	12.71
835	81EQ40 85PF1	15.30	11.61
836	81ER40	16.40	7.01
837	81EY40	15.90	8.81
838	81EA41	14.40	17.51
839	81ED41 U	16.90	5.51
840	81EK41	14.30	18.31
841	81EL41	15.40	11.11
842	81EV41	14.90	13.91
843	81EX41 78SC3	12.96	34.01
844	81EA42 89VY	15.90	8.81
845	81EF42	15.40	11.11
846	81EO42	14.62	15.81
847	81EP42	14.53	16.51
848	81EQ42 76MA	12.80	36.61
849	81ER42	14.90	13.91
850	81ES42	15.40	11.11
851	81ET42 78NP7	15.13	12.51
852	81EY42	17.40	4.41
853	81EA43	16.40	7.01
854	81ED43 87SW2	13.49	26.61
855	81EQ43	17.40	4.41
856	81ER43	15.32	11.51
857	81ET43	14.90	13.91
858	81EX43 88CL5	14.33	18.11
859	81EG44	13.56	25.81
860	81EF45	14.98	13.41
861	81EM45	15.40	11.11
862	81EW45	13.40	27.81
863	81EY45	13.40	27.81
864	81EE46	14.90	13.91
865	81EV46	15.90	8.81
866	81EZ46 63TF	14.40	17.51
867	81EF47	14.89	14.01
868	81ES47	16.40	7.01
869	81EZ47 75XX1	14.17	19.51
870	81FP	14.90	13.91
871	B171 81GC	13.10	31.91
872	B180 81GG	13.40	27.81
873	B193 81GP	13.76	23.51
874	B192 81GQ	13.40	27.81
875	81GD1	13.90	22.11
876	81GN1 81GP1	13.40	27.81
877	B203 81JG	11.48	67.21
878	81JX1 86WP	13.90	22.11
879	81JE2 80CH	13.90	22.11
880	81JS2 89SH9	14.40	17.51
881	81JB3 68KF	14.80	14.61
882	81JE3 72GB2	14.20	19.21
883	81KJ 75HB	12.40	44.01
884	B261 81OH	13.90	22.11
885	B255 81PK	12.77	37.11
886	81QC	13.40	27.81
887	B264 81QF	14.50	16.71
888	81QT 88RK4	13.40	27.81
889	81QX A13CG	13.27	29.51
890	81QE1 81RJ4	13.97	21.41
891	81QG1 76SN7	12.90	35.01
892	B285 81QE2	14.40	17.51
893	B281 81QH2	14.50	16.71
894	81QV2 90VK3	13.40	27.81
895	81QY2 63UL	12.80	36.61
896	81QE3 81TO	12.40	44.01
897	81QP3 89EB2	12.06	51.51
898	81QT3 68FB	11.90	55.41
899	T47 81RF	13.84	22.71
900	81RQ 85QU	12.90	35.01

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
901	81RA2 90SA4	12.90	35.01	951	B408 82DU	12.90	35.01
902	81RP2 34NO	11.40	69.81	952	82DC2 89GF5	15.00	13.31
903	81RM3 81SQ	12.98	33.71	953	82DX3 89GY4	14.50	16.71
904	81RR3 71SZ1	14.40	17.51	954	82DQ6 84UO1	13.40	27.81
905	81RC5	13.01	33.21	955	82FA 89EO2	13.90	22.11
906	81SM 76JT4	13.40	27.81	956	82FC 89CP1	13.90	22.11
907	81SN 85UM	13.42	27.51	957	B434 82FJ	11.40	69.81
908	81SO 90EL5	13.40	27.81	958	B436 82FN	13.81	23.01
909	T9 81SN1	13.51	26.41	959	82FF3 HH632	13.75	23.61
910	S29 81SY1	13.40	27.81	960	82FG3 36TE	13.40	27.81
911	T46 81SE2	14.30	18.31	961	82FK3 78EN8	13.90	22.11
912	81SU2 54XH	14.11	20.01	962	82FP3 82HW2	12.83	36.11
913	81SD4 73YO3	11.90	55.41	963	82FX3 87CM	11.90	55.41
914	81SA5 76SF6	12.40	44.01	964	82HB2	13.81	23.01
915	81SA7 73YK2	12.80	36.61	965	82JE1 76WN	14.14	19.81
916	81SC7 81WG7	13.40	27.81	966	82JR1 83VG1	13.50	26.51
917	81SW7 76YK2	12.12	50.11	967	82MA 90QS5	14.80	14.61
918	81TJ 86WH9	12.90	35.01	968	B492 82OF	13.76	23.51
919	81TK	14.40	17.51	969	82OS 90OT1	13.40	27.81
920	81TJ3 81WK	12.90	35.01	970	82PC 82QL	14.40	17.51
921	81TJ4 54SW	11.40	69.81	971	82PR 88VG	11.90	55.41
922	81UA 88TH	15.40	11.11	972	82QK3 86XE4	13.90	22.11
923	81UT 89AN	12.90	35.01	973	B505 82RW	13.90	22.11
924	81UB1 81SP5	12.40	44.01	974	82RK1 78ND8	14.40	17.51
925	81UT7 81WX	12.40	44.01	975	82RM1 74DK2	12.90	35.01
926	81UB10 70WG1	13.40	27.81	976	82RO1 89UU2	14.10	20.11
927	81UM11 81VT	14.29	18.41	977	82RW1 89TZ13	14.60	16.01
928	81UQ11 90DP1	13.40	27.81	978	82ST 90SX1	14.00	21.11
929	81UU11 81WF	13.40	27.81	979	82SV	14.40	17.51
930	81US14 81VM	13.90	22.11	980	82SE1 88XG	12.00	52.91
931	S15 81VK	12.40	44.01	981	82SH1	16.40	7.01
932	B289 81VS	12.56	40.91	982	82SJ1 85JC	13.30	29.11
933	B338 81VC1	13.66	24.61	983	82SL1 40XB	14.40	17.51
934	81VP2 53VJ1	12.90	35.01	984	82SC2 58DL	13.01	33.21
935	B315 81WR	13.40	27.81	985	82SA4 82UR	13.70	24.21
936	B308 81WA1	11.90	55.41	986	82SG4 82SP4	11.79	58.31
937	B317 81WE1	13.40	27.81	987	82SO5 78WV1	14.90	13.91
938	81WF9 88TK2	14.70	15.31	988	82SV5 31TR3	14.00	21.11
939	81XH2 54RL	11.90	55.41	989	82SX5 56TB1	12.40	44.01
940	81YS1 71BS1	13.50	26.51	990	82SC6 64TE1	13.40	27.81
941	82BJ	13.81	23.01	991	82ST6 77RM2	12.40	44.01
942	B365 82BS	12.90	35.01	992	82SM7 87QZ2	12.40	44.01
943	B378 82BW	11.40	69.81	993	82ST7 86ON	14.20	19.21
944	B367 82BE1	13.40	27.81	994	82SG12 82ST12	14.40	17.51
945	B397 82BS1	13.24	29.91	995	B559 82TT	11.90	55.41
946	82BP2 89AB2	14.10	20.11	996	82TX	15.30	11.61
947	82BQ2 89AP3	13.90	22.11	997	82TG1 69UL2	12.90	35.01
948	82BQ4 75VK5	11.85	56.71	998	82TP1 51YK1	13.06	32.51
949	82CE 89CZ3	13.90	22.11	999	82TD2 87DJ2	13.40	27.81
950	B407 82DK	13.13	31.41	1000	82TF2 78NW7	13.87	22.41

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1001	82TQ2 82VQ9	14.27	18.61	1051	S58 83AC1	13.90	22.11
1002	82TK3 88AM2	12.90	35.01	1052	83AH1 87AA	13.90	22.11
1003	82UE 79YV7	13.40	27.81	1053	83AF2 87SG7	13.50	26.51
1004	B565 82UH	13.71	24.11	1054	83AO2 50CD	11.40	69.81
1005	B571 82UP	14.40	17.51	1055	83AA3 88GA1	12.90	35.01
1006	82UV1 71SA2	12.33	45.51	1056	B633 83BH	13.20	30.51
1007	82UD2 87UF	12.48	42.41	1057	83BM A18EM	12.10	50.51
1008	82UF2 89UG6	14.40	17.51	1058	B643 83CC	13.55	25.91
1009	82UM2 86VH	13.75	23.61	1059	83CE 83CB1	12.14	49.61
1010	82UP2 72TX	12.90	35.01	1060	83CM 53GA1	13.53	26.21
1011	82UQ3 86WR	14.05	20.61	1061	B662 83CA1	12.26	46.91
1012	82UW3 79CB	10.90	87.81	1062	T92 83CF1	10.90	87.81
1013	82UT5 72TC1	13.80	23.11	1063	T112 83CZ2	13.90	22.11
1014	82UU5 82VD6	13.21	30.31	1064	83CN3 87DL	12.68	38.71
1015	82UX5 89GJ1	13.40	27.81	1065	83CO3 72AJ	12.90	35.01
1016	82UM6 78RA4	14.40	17.51	1066	83DC 76JD1	13.50	26.51
1017	82UP6 88JA	12.31	45.91	1067	E1 83EV	12.50	42.01
1018	82UQ6 72TZ6	12.40	44.01	1068	83EM1 78VS2	13.90	22.11
1019	82US6 86VQ	13.72	24.01	1069	83GQ 89CO7	13.90	22.11
1020	82UT6 77UF1	13.00	33.41	1070	83GR 83JS	12.79	36.81
1021	82UY6 82VU	13.50	26.51	1071	T121 83HJ	11.92	54.91
1022	82UA7 82XR2	12.90	35.01	1072	T155 83HB1	11.46	67.91
1023	82UD7 86UF	13.24	29.91	1073	T144 83JQ	12.20	48.31
1024	82UE7 87SR28	12.60	40.11	1074	83LB	16.57	6.51
1025	82UG7 82XR3	14.31	18.31	1075	83LC	18.90	2.21
1026	82UJ7 89AE3	12.63	39.61	1076	B694 83NL	12.90	35.01
1027	82UH8 82TM	12.90	35.01	1077	B702 83NR	12.65	39.21
1028	82UR10 76SG	13.30	29.11	1078	B717 83OD	13.83	22.81
1029	82UX10 86VG3	12.80	36.61	1079	83PB	14.98	13.41
1030	82UC11 82TO2	14.60	16.01	1080	83PX 74TF1	13.60	25.31
1031	82UE12 84DW	12.40	44.01	1081	83PY 79KB1	14.20	19.21
1032	B604 82VZ	12.40	44.01	1082	83PZ 90SY1	13.90	22.11
1033	B602 82VB1	13.90	22.11	1083	83QE 87OW1	13.40	27.81
1034	82VY2 86PU2	13.00	33.41	1084	83QG 79YL9	13.40	27.81
1035	82VC3 86TA2	14.38	17.71	1085	83RB	15.90	8.81
1036	82VE4 87BM2	13.40	27.81	1086	83RX 82DK2	13.40	27.81
1037	82VD5 77HW	14.72	15.11	1087	B750 83RT1	13.90	22.11
1038	82VM5 75TU1	13.90	22.11	1088	B722 83RG2	14.20	19.21
1039	82VK12 87QP7	11.78	58.61	1089	B726 83RP2	14.30	18.31
1040	82WA	13.90	22.11	1090	83RK3 65AE	13.40	27.81
1041	82WE	12.90	35.01	1091	83RM3 88AM1	13.90	22.11
1042	82XV 64FJ	13.40	27.81	1092	83RT3 87QJ2	13.90	22.11
1043	82XQ1 79FC2	12.40	44.01	1093	83RW3 90RJ1	15.00	13.31
1044	82YA	16.40	7.01	1094	83RX3 77DE5	13.40	27.81
1045	82YL1 56XS	12.40	44.01	1095	T169 83RC4	14.32	18.21
1046	S44 83AA	14.40	17.51	1096	S163 83RL4	13.82	22.91
1047	S38 83AD	12.59	40.31	1097	83RQ4 87SR	13.04	32.81
1048	S36 83AJ	13.67	24.51	1098	83RR4 32RC	13.74	23.71
1049	B617 83AN	12.71	38.21	1099	83RT4 75XU4	13.30	29.11
1050	S54 83AW	14.58	16.11	1100	83RY4 88XS	12.17	48.91

ID/2 No.	Provisional Designation	H	Input D
1101	83TA	16.55	6.51
1102	83TU 73YV2	13.59	25.41
1103	83TE1 79SD12	13.60	25.31
1104	B759 83TN1	13.24	29.91
1105	B778 83TS1	12.40	44.01
1106	B779 83TW1	13.25	29.81
1107	J1 83TD2	13.01	33.21
1108	T165 83TR2	12.10	50.51
1109	83UC 69UT1	14.00	21.11
1110	83VA	16.40	7.01
1111	83VQ1	14.40	17.51
1112	S158 83VM7	13.40	27.81
1113	S157 83VN7	12.62	39.81
1114	B797 83WG	12.90	35.01
1115	B788 83WH	13.45	27.11
1116	B794 83WJ	12.36	44.81
1117	B789 83WL	13.30	29.11
1118	N786 83WM	13.60	25.31
1119	83WF1	11.90	55.41
1120	B804 83XE	14.40	17.51
1121	B803 83XF	14.78	14.71
1122	B805 83XG	11.90	55.41
1123	83XW 88PY1	12.35	45.01
1124	83XX 79SF12	13.40	27.81
1125	83XH1 75BM1	12.90	35.01
1126	B829 84AR	12.36	44.81
1127	84BC	15.90	8.81
1128	84BK 73AF2	12.90	35.01
1129	B858 84CP	13.90	22.11
1130	84DA	14.35	17.91
1131	84DE 71BL	12.30	46.11
1132	84DN 88AC5	13.90	22.11
1133	84DQ 80FU9	13.90	22.11
1134	84DX 88DO2	13.90	22.11
1135	84DY 89AP	12.40	44.01
1136	84DC1 57TO	13.60	25.31
1137	84DE1 77FL3	12.40	44.01
1138	84DF1 82VN7	13.50	26.51
1139	B868 84EC	12.65	39.21
1140	B875 84EM	13.40	27.81
1141	S67 84EY	13.40	27.81
1142	S66 84EA1	11.63	62.71
1143	84EN1 78QN3	13.93	21.81
1144	84ER1 82VC11	12.30	46.11
1145	84FM 86UB1	13.28	29.31
1146	84FN 86VT6	14.40	17.51
1147	84FS 28DH	12.42	43.61
1148	84FU 86XD3	13.90	22.11
1149	84GR 33FN1	11.64	62.51
1150	84HE1 69RZ	11.73	59.91
1151	84HR1 85RM4	13.00	33.41
1152	84HS1 78SQ2	13.90	22.11
1153	84JA2 81XB1	12.40	44.01
1154	84KB	15.40	11.11
1155	84OA 83GU2	12.83	36.11
1156	84QF 88OE	12.41	43.81
1157	84QQ 88VM7	12.90	35.01
1158	84QR 71BV	12.90	35.01
1159	84QS 78NB8	13.16	31.01
1160	84SH 78XB1	13.90	22.11
1161	84SM 49OH1	12.90	35.01
1162	84SR 73SF	14.90	13.91
1163	84SA1 73YP2	13.20	30.51
1164	84SC1 88SE	13.64	24.91
1165	84SF1 33FC1	13.65	24.81
1166	84SG1 86AB2	12.40	44.01
1167	84SS1 89EP3	14.90	13.91
1168	84SZ1 88RG2	13.10	31.91
1169	S108 84SQ2	14.40	17.51
1170	S115 84SR2	13.90	22.11
1171	S139 84SQ3	13.40	27.81
1172	S144 84SU3	13.90	22.11
1173	84SQ4 49KO	12.32	45.71
1174	84SO5 80TL14	13.00	33.41
1175	84SX5 77SK2	13.90	22.11
1176	84SY5 90TO8	12.50	42.01
1177	84SH6 90EN5	13.40	27.81
1178	84SJ7 89AA3	13.40	27.81
1179	B919 84UT	12.90	35.01
1180	B945 84UW	13.54	26.01
1181	B946 84UX	13.40	27.81
1182	84UC1 82BB12	13.90	22.11
1183	84UK1 88XS2	13.40	27.81
1184	B927 84UX1	13.81	23.01
1185	B934 84UX2	12.60	40.11
1186	B940 84UB3	12.50	42.01
1187	84UT3 50TP	13.60	25.31
1188	84WE1	12.90	35.01
1189	B975 84WM1	13.74	23.71
1190	84YH1 78NC1	13.00	33.41
1191	84YE4 89EA	13.70	24.21
1192	85AE 79007	14.40	17.51
1193	85CG 80WU	13.65	24.81
1194	85CJ1 89FK	13.40	27.81
1195	85CN1 78EC	14.50	16.71
1196	85CS1 51JW	13.90	22.11
1197	85CZ1 79005	13.90	22.11
1198	85CA2 87XV	13.50	26.51
1199	85CE2 87SC7	13.40	27.81
1200	85CH2 79UN1	13.90	22.11

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1201	85CR2 73WK	14.28	18.51	1251	85RD3 69TQ2	14.90	13.91
1202	85DD	13.79	23.21	1252	85RU3 A11UF	12.40	44.01
1203	85DY1 71TD1	12.90	35.01	1253	85RC4 86WF7	12.57	40.71
1204	85DX2 90DQ	11.40	69.81	1254	85RJ4 74SD1	13.29	29.21
1205	85FH 89GC	13.40	27.81	1255	85RR4 90UD4	14.00	21.11
1206	B1006 85FU1	12.99	33.51	1256	85RV4 62PH	12.80	36.61
1207	B1026 85FB2	13.50	26.51	1257	85RZ4 76SL7	12.35	45.01
1208	B1055 85GO	14.10	20.11	1258	85RJ5 89UT3	14.50	16.71
1209	B1042 85GW	13.30	29.11	1259	85RK5 74HQ2	15.40	11.11
1210	85GU1 76GH1	11.90	55.41	1260	85RK6 64JB	13.26	29.61
1211	85HL 89FD	13.90	22.11	1261	85SR 77HQ	13.90	22.11
1212	85HG1 85JZ	13.39	27.91	1262	85SE1 34RC	13.90	22.11
1213	B1077 85JJ	11.90	55.41	1263	85SX2 81UP8	13.90	22.11
1214	B1081 85JL	13.50	26.51	1264	85SJ3 78PV1	13.90	22.11
1215	85JY 69TC	12.40	44.01	1265	85SL3 78SC2	14.40	17.51
1216	85JU1 76UW17	14.37	17.81	1266	85SM3 88PQ1	14.40	17.51
1217	85KA	14.40	17.51	1267	85SW4 48AJ	12.90	35.01
1218	85KC 79QT3	14.20	19.21	1268	B1169 85TL	12.42	43.61
1219	B1090 85PL	13.40	27.81	1269	B1184 85TP	12.40	44.01
1220	B1097 85PM	12.81	36.41	1270	B1181 85TH1	12.78	36.91
1221	B1109 85PO	13.40	27.81	1271	B1205 85TJ1	12.40	44.01
1222	B1115 85PE1	14.84	14.31	1272	B1203 85TM1	13.29	29.21
1223	85PL1 85QH2	13.90	22.11	1273	B1198 85TQ1	12.40	44.01
1224	85PZ1 78TF7	13.26	29.61	1274	B1214 85TS1	12.19	48.51
1225	85PC2 80VO2	12.90	35.01	1275	B1208 85TW1	13.90	22.11
1226	85PD2 69VN1	13.90	22.11	1276	B1215 85TY1	13.40	27.81
1227	85PE2 48GA	13.16	31.01	1277	85TB3 72TH1	14.30	18.31
1228	85PG2 89TJ	13.91	22.01	1278	85TG3	9.98	134.21
1229	B1133 85QN	12.40	44.01	1279	85TP3 78SB2	14.40	17.51
1230	85QR 79OP8	12.11	50.31	1280	B1199 85UA	13.45	27.11
1231	85QH5 72TB11	13.40	27.81	1281	B1190 85UC	13.90	22.11
1232	85QM5 90QO2	13.31	28.91	1282	85UG2 90EB8	14.00	21.11
1233	85QP5 65UL2	13.40	27.81	1283	85UH3 89WP1	13.50	26.51
1234	85QO6 85SW1	12.83	36.11	1284	85UJ3 78UO3	13.90	22.11
1235	85RD 90OU3	12.60	40.11	1285	85UV4 31RO	12.90	35.01
1236	B1156 85RG	14.30	18.31	1286	85UW4 90QR4	11.90	55.41
1237	B1155 85RH	12.90	35.01	1287	85UY4 78TK4	13.30	29.11
1238	B1148 85RP	14.40	17.51	1288	85UB5 69TQ	12.01	52.71
1239	B1150 85RQ	14.80	14.61	1289	85UF5 81UB11	13.90	22.11
1240	B1146 85RS	12.40	44.01	1290	85UG5 78WT7	14.03	20.81
1241	85RU 89PD	13.90	22.11	1291	85VD 90QG5	12.10	50.51
1242	85RV	15.40	11.11	1292	85VN 31VK1	13.00	33.41
1243	85RW	15.40	11.11	1293	85VP 73SL3	11.46	67.91
1244	85RZ 43ER	13.40	27.81	1294	B1220 85VC1	12.90	35.01
1245	85RL1 70SP	13.34	28.51	1295	B1218 85VD1	12.70	38.31
1246	85RS1 70PW	13.77	23.41	1296	B1219 85VF1	14.40	17.51
1247	85RE2 34RH	13.27	29.51	1297	85VP3 73UL3	11.87	56.21
1248	85RP2 79MY	12.90	35.01	1298	85WA	17.90	3.51
1249	85RU2 55SH	14.20	19.21	1299	85XB	13.85	22.61
1250	85RB3 48TF	14.90	13.91	1300	85XR 89UE3	12.40	44.01

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1301	85XS 740F1	13.20	30.51	1351	86QO 71SW2	13.46	27.01
1302	86AE	13.25	29.81	1352	86QT 89LD	14.02	20.91
1303	86AH 86AR1	14.40	17.51	1353	86QY 88BH1	12.90	35.01
1304	86AJ 90OR	13.90	22.11	1354	86QB1 72TW6	12.40	44.01
1305	86AK	12.48	42.41	1355	86QG1 90UM3	15.00	13.31
1306	B1259 86AG1	13.40	27.81	1356	86QL1 84BZ	12.72	38.01
1307	H8 86AA2	12.90	35.01	1357	86QT1 90TS8	14.50	16.71
1308	B1278 86AO2	13.34	28.51	1358	86QX1 88BK1	13.90	22.11
1309	86CB 88PJ	13.90	22.11	1359	86QJ2 90FZ2	13.00	33.41
1310	86CG	13.30	29.11	1360	86QP2 81SG8	12.90	35.01
1311	86CL1 80YT	12.40	44.01	1361	86QQ2 88BD2	13.61	25.21
1312	86CP1 77AE2	13.56	25.81	1362	86QZ2 82SA3	13.34	28.51
1313	86CQ1 88UG	12.88	35.31	1363	86QA3 73UW5	13.91	22.01
1314	86CS1 88RV3	14.79	14.61	1364	86QB3 75VU9	12.79	36.81
1315	86CC2 62PJ	13.70	24.21	1365	86QN3 79MB1	14.40	17.51
1316	86DA	15.90	8.81	1366	86QR3 89LN	13.23	30.01
1317	86EJ 90MZ	12.90	35.01	1367	86QS3 89AH7	12.60	40.11
1318	86EN 90FK	13.40	27.81	1368	86QX3 77DE2	13.40	27.81
1319	B1305 86ET	12.90	35.01	1369	86QA4 79GN	12.40	44.01
1320	B1304 86EZ	12.40	44.01	1370	86QY4 54XF	11.40	69.81
1321	B1321 86EJ1	12.92	34.61	1371	86RA	15.90	8.81
1322	B1334 86EZ1	12.90	35.01	1372	86RJ 69EK	13.81	23.01
1323	86EQ2 82KM2	13.20	30.51	1373	86RQ 65UO2	13.90	22.11
1324	86EZ4 74YS	13.90	22.11	1374	86RW 79YU8	13.50	26.51
1325	86EE5 62WH2	12.32	45.71	1375	86RD1 39PB	12.31	45.91
1326	86GC 82BB6	13.90	22.11	1376	86RK1 31TY	12.90	35.01
1327	86GD 88UR	13.90	22.11	1377	86RO1 86PL4	13.27	29.51
1328	86GY 82BK3	14.70	15.31	1378	86RP1 77QT3	12.49	42.21
1329	86GZ	15.48	10.71	1379	86RS1 79OE11	14.40	17.51
1330	86JA 90OP	13.40	27.81	1380	86RE2	11.90	55.41
1331	86JD 86LE	13.90	22.11	1381	B1488 86RR2	13.90	22.11
1332	86JK	18.90	2.21	1382	B1485 86RS2	14.11	20.01
1333	86JQ 89QH1	13.90	22.11	1383	B1486 86RT2	13.30	29.11
1334	B1368 86JT	12.80	36.61	1384	B1484 86RU2	13.50	26.51
1335	86JN1 86LF	14.12	19.91	1385	B1482 86RV2	13.99	21.21
1336	86NA	19.90	1.41	1386	B1487 86RW2	13.37	28.21
1337	86PE 89LR	13.53	26.21	1387	86RJ4 77DA3	14.20	19.21
1338	86PQ 88BQ	12.40	44.01	1388	86RU4 86VC1	10.90	87.81
1339	86PC1 75RK1	11.90	55.41	1389	86RB5 49OQ	13.40	27.81
1340	86PD1 88BU3	13.40	27.81	1390	86RD5 82YY	12.20	48.31
1341	86PQ1 79HR	12.40	44.01	1391	86RQ5 82UE1	12.90	35.01
1342	86PU1 75TO1	15.00	13.31	1392	86RT5 88CK2	12.90	35.01
1343	86PN4 81UV12	11.90	55.41	1393	86RU5 82SN4	11.90	55.41
1344	86PT4 86RW4	11.90	55.41	1394	86RC7 59UB	13.40	27.81
1345	86PW4 81TV3	12.40	44.01	1395	86RF7 86SG3	14.40	17.51
1346	86PX4 88DP2	13.40	27.81	1396	86RB12 87XQ	10.90	87.81
1347	86PB5 75RA1	11.80	58.01	1397	86RH12 89GE5	12.48	42.41
1348	86PX5 78TJ4	13.22	30.21	1398	86RF13 71SV	11.40	69.81
1349	86PK6 89LS	13.40	27.81	1399	86SF 75EL5	13.40	27.81
1350	86QN 78QA3	13.83	22.81	1400	86SC2 82QB2	12.80	36.61

ID/2 No.	Provisional Designation	H	Input D
1401	86SD2 86WE5	11.70	60.81
1402	86TL 69PD	12.00	52.91
1403	86TM	12.02	52.41
1404	86TU 86WC8	12.90	35.01
1405	B1507 86TC1	13.79	23.21
1406	B1532 86TG1	13.30	29.11
1407	B1534 86TK1	13.50	26.51
1408	B1535 86TL1	13.90	22.11
1409	B1536 86TM1	12.59	40.31
1410	B1523 86TZ1	13.52	26.31
1411	B1548 86TJ2	13.22	30.21
1412	86TB3 86VE5	13.90	22.11
1413	86TO3 64VS1	13.60	25.31
1414	86TK4 79YR	13.71	24.11
1415	86TL4 79YC9	13.90	22.11
1416	86TR6 89EY4	9.90	139.21
1417	86TS6 89BX	9.87	141.11
1418	86TU6 78ED7	11.80	58.01
1419	86TT11 90TZ8	13.50	26.51
1420	86TB12 88JM1	13.01	33.21
1421	86UA 69TR5	11.90	55.41
1422	86UG 86WF	14.27	18.61
1423	86UO HH606	14.19	19.31
1424	86UQ 76JZ10	13.74	23.71
1425	86UU 86XC1	13.92	21.91
1426	86UM1 54UC2	12.40	44.01
1427	86UH3 HH638	14.49	16.81
1428	86VE 78WC3	13.99	21.21
1429	86VG 83CU2	11.40	69.81
1430	86VT 75VY2	11.40	69.81
1431	86VD1 71OH1	11.90	55.41
1432	86VG1 90FN	9.40	175.21
1433	B1604 86VV6	12.83	36.11
1434	B1605 86VW6	12.97	33.91
1435	86WE 38GD	12.90	35.01
1436	86WG 84KS	13.40	27.81
1437	86WB1 84DL1	13.82	22.91
1438	86WL1 84DL1	13.40	27.81
1439	86WO1 86XG	14.40	17.51
1440	86WQ2	13.40	27.81
1441	86WP8 88CA6	12.60	40.11
1442	86XH 83AP2	13.14	31.31
1443	B1622 86XT	14.20	19.21
1444	86YA 75XJ2	10.49	106.11
1445	87BC 53EK	12.00	52.91
1446	87BB2 77HM	14.40	17.51
1447	87BC2 65UU	13.74	23.71
1448	87BS2 82VX10	14.40	17.51
1449	87CJ 66CZ	11.90	55.41
1450	87DF	12.90	35.01
1451	87DJ 85YN1	11.80	58.01
1452	87DC6 37CC	12.02	52.41
1453	87DE6 90QE1	12.02	52.41
1454	87DG6 57HX	13.40	27.81
1455	87DH6 52FC	11.90	55.41
1456	87DM6 89WJ4	13.90	22.11
1457	87DP6 90UR3	13.00	33.41
1458	87DS6 76GE1	11.99	53.21
1459	87DU6 55MS	12.90	35.01
1460	87DW6 76GG6	12.40	44.01
1461	B1673 87EH	12.10	50.51
1462	87EP 80RB4	11.90	55.41
1463	87FF1 81WF1	12.29	46.31
1464	87GC 83LH	12.58	40.51
1465	87GK 89TH2	13.30	29.11
1466	87HA 89XQ	14.40	17.51
1467	87HS 87FK1	13.40	27.81
1468	87HW 73GP	11.90	55.41
1469	87HE1 71OW	13.32	28.81
1470	87KB 51TR	12.97	33.91
1471	87MK 78PU4	12.90	35.01
1472	87OA	18.40	2.81
1473	87OC 89CG6	13.40	27.81
1474	87OM 50TR3	14.12	19.91
1475	87OQ 79XR1	13.14	31.31
1476	87OR 90FF	13.40	27.81
1477	87PA	18.40	2.81
1478	87PL 81GT1	12.40	44.01
1479	87QB	18.90	2.21
1480	87QM 87SX	13.10	31.91
1481	87QR 69TS	13.80	23.11
1482	87QS 89CX4	14.40	17.51
1483	87QX	15.40	11.11
1484	87QL1 65QE	13.40	27.81
1485	87QS1 90BF1	13.10	31.91
1486	87QT1 90EY4	14.35	17.91
1487	87QW1 77UV	12.95	34.21
1488	87QZ1 89CG5	13.90	22.11
1489	87QG2 52RP	13.40	27.81
1490	87QW2 52KF1	12.40	44.01
1491	87QH3 87SE2	14.23	18.91
1492	87QD6 A21EB	10.90	87.81
1493	87QF7 81GG1	12.90	35.01
1494	87QN7 79UK1	13.90	22.11
1495	87QS7 78XC1	12.40	44.01
1496	87QW7 80WP2	13.90	22.11
1497	87QU10 77QB5	12.40	44.01
1498	87QY10 90HC	11.10	80.11
1499	87RG 81NR1	12.40	44.01
1500	87RJ 82BT10	13.75	23.61

ID/2 No.	Provisional Designation	H	Input D
1501	87RY 64TP1	11.90	55.41
1502	87RZ 81NJ1	13.60	25.31
1503	87RA1 90DV2	12.10	50.51
1504	87RC1 88VU3	11.40	69.81
1505	87RD1 79YL3	13.00	33.41
1506	87RM1 89CK	13.81	23.01
1507	87RO3 75VX3	14.40	17.51
1508	87RP3 78VK13	12.40	44.01
1509	87RB6 81XW1	13.80	23.11
1510	87RG6 78WK13	12.24	47.41
1511	87SJ 54UX	13.00	33.41
1512	87SL	15.40	11.11
1513	B1761 87SO	13.90	22.11
1514	B1754 87SV	12.90	35.01
1515	B1751 87SB1	12.90	35.01
1516	B1744 87SG1	13.90	22.11
1517	B1741 87SJ1	14.90	13.91
1518	B1735 87ST1	12.40	44.01
1519	B1736 87SW1	13.87	22.41
1520	87SG2 75VX4	13.30	29.11
1521	87SH2 55RU	13.70	24.21
1522	87SF3	18.90	2.21
1523	87SJ3 55BF1	13.70	24.21
1524	87SN3 89CG3	14.40	17.51
1525	87SQ3 53RP	12.90	35.01
1526	87SS3 51JN	13.69	24.31
1527	B1770 87SV3	14.90	13.91
1528	B1780 87SC4	14.40	17.51
1529	B1779 87SD4	13.60	25.31
1530	B1781 87SE4	13.03	32.91
1531	87SJ5 76GW3	12.90	35.01
1532	87SO5 82UC9	12.40	44.01
1533	87SZ6 65TB	10.40	110.61
1534	87SE7 77QX4	14.90	13.91
1535	87SS9 89AC4	13.40	27.81
1536	87SL10 87RK	11.90	55.41
1537	87SN11 82XO3	13.40	27.81
1538	87ST11 69UQ2	14.00	21.11
1539	87SM12 80FG	12.90	35.01
1540	87SR12 76GM3	13.99	21.21
1541	87SV12 76SM3	12.90	35.01
1542	87SG13 87WZ2	14.40	17.51
1543	87SQ17 43UD	13.00	33.41
1544	87SS17 81SP2	12.40	44.01
1545	87ST17 83RJ5	13.40	27.81
1546	87SX17 76SE8	13.30	29.11
1547	Z2 87UG	13.90	22.11
1548	87UJ 83VN1	13.16	31.01
1549	87UW	13.90	22.11
1550	87UV1 76YN5	13.90	22.11
1551	87UX1 80TZ14	13.26	29.61
1552	87UP2 87WD1	13.40	27.81
1553	87UU2 76HE1	13.40	27.81
1554	87UQ3 79HO4 U	13.27	29.51
1555	87US4 76SU5	14.20	19.21
1556	87UU4 73UP1	13.40	27.81
1557	87UF5 78WV4	12.40	44.01
1558	87VB 50TX2	12.90	35.01
1559	87VT 80DN4	12.37	44.61
1560	87VU 60WA	12.70	38.31
1561	87VC1 72BV	13.30	29.11
1562	87VG1 76YA5	12.10	50.51
1563	87WC	19.40	1.81
1564	B1801 87WF	13.40	27.81
1565	87WS 87UP1	11.16	77.91
1566	R1 87WJ1	12.40	44.01
1567	87WT1	13.12	31.61
1568	87WV1 HH571	15.30	11.61
1569	87WU2 89AS5	12.40	44.01
1570	87XC 82JG1	14.01	21.01
1571	87YH 56ET	13.40	27.81
1572	87YK 80BT	12.90	35.01
1573	87YL1 90HZ	11.90	55.41
1574	87YS1 89GT6	13.40	27.81
1575	87YU1 86WW8	10.40	110.61
1576	88AF 86SF3	12.24	47.41
1577	88AG 74DO	12.40	44.01
1578	88AL 51EC	11.90	55.41
1579	88AF1 62XK1	13.90	22.11
1580	88AW1	12.15	49.41
1581	88AX1	13.90	22.11
1582	88AX4 90OX4	13.40	27.81
1583	88AA5 82SN12	13.50	26.51
1584	88AE5 81XE2	12.40	44.01
1585	88BB 70GP2	12.74	37.61
1586	88BJ	14.90	13.91
1587	88BK 62XH	12.13	49.81
1588	88BL 61CQ	13.12	31.61
1589	88BN	12.40	44.01
1590	88BV 83VK7	13.40	27.81
1591	88BW1	9.90	139.21
1592	88BX1	9.40	175.21
1593	88BY1	9.90	139.21
1594	88BZ1 82BU10	11.90	55.41
1595	88BL2 71SJ3	11.60	63.61
1596	88BP3 90SW2	13.10	31.91
1597	88BS3 72NH	14.10	20.11
1598	88BX3 74HW	13.40	27.81
1599	88BB4 76YN1	13.04	32.81
1600	88BG4 86RX11	12.40	44.01

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1601	88BK4 77DK	12.40	44.01	1651	88JO 82YX	12.19	48.51
1602	88BE5 5027T2	13.17	30.91	1652	88JP 85X01	12.40	44.01
1603	88BH5	13.40	27.81	1653	88JU 77EZ1	13.44	27.31
1604	88BK5	12.40	44.01	1654	88JV	11.19	76.81
1605	88BO5 57WT	13.40	27.81	1655	88JW 84HW	13.40	27.81
1606	88CH 74SM	12.90	35.01	1656	88JB1	13.90	22.11
1607	88CJ 86XC2	12.74	37.61	1657	88KA 82VE2	12.90	35.01
1608	88CK 51XP	13.51	26.41	1658	88KC 72XU1	13.31	28.91
1609	88CL 70AZ	12.90	35.01	1659	88LA 30QN	12.90	35.01
1610	88CO 86TS3	12.40	44.01	1660	88LB 84MA	12.56	40.91
1611	88CH2 69VN2	13.32	28.81	1661	88LH 830Q	13.40	27.81
1612	88CN2 75VE4	12.60	40.11	1662	88MB 85YB	13.09	32.01
1613	88CS2 73SL4	13.80	23.11	1663	88ME 78YU	13.09	32.01
1614	88CT2 78RN4	13.40	27.81	1664	88MF	13.52	26.31
1615	88CW2 78WC1	14.40	17.51	1665	88MG 78QN1	13.90	22.11
1616	88CH3	13.40	27.81	1666	88NN 55HK	13.40	27.81
1617	88CX3 79XW	13.60	25.31	1667	88PA	17.40	4.41
1618	88CD4 85QR3	12.15	49.41	1668	88PP 78EA1	11.90	55.41
1619	88CK4 89NW	13.90	22.11	1669	88PT 79HX3	12.90	35.01
1620	88CN4 76GK5	13.50	26.51	1670	88PY	10.20	121.21
1621	88CX4 3021T3	14.80	14.61	1671	88PB1	9.90	139.21
1622	88CF5 59PA	12.60	40.11	1672	88PH1	10.90	87.81
1623	88CT5 73QK1	12.40	44.01	1673	88PJ1 70EW1	13.40	27.81
1624	88CU7 88EG2	12.90	35.01	1674	88PM1 89YL3	13.90	22.11
1625	88DA 78GD4	13.22	30.21	1675	88PR1 78ND3	12.21	48.01
1626	88DJ 900U4	12.35	45.01	1676	88PM2	13.90	22.11
1627	88DO	14.40	17.51	1677	88PX2 78TH2	12.90	35.01
1628	88DR 71DE1	13.50	26.51	1678	88QC	17.02	5.21
1629	88DJ1 90QY1	13.60	25.31	1679	88QE	10.03	131.11
1630	88DD3	12.90	35.01	1680	88QP 84YY3	12.40	44.01
1631	88EB 48UQ	11.90	55.41	1681	88QD1 51LO	13.00	33.41
1632	88EC	13.90	22.11	1682	88RA	12.90	35.01
1633	88ED 88BA3	12.80	36.61	1683	88RB 37KH	11.90	55.41
1634	88EF 83VX	13.57	25.71	1684	88RD 90FG2	12.90	35.01
1635	88EG	18.90	2.21	1685	88RE	14.90	13.91
1636	88EL	14.40	17.51	1686	88RK 54SL	14.40	17.51
1637	88EN 85PN1	13.37	28.21	1687	88RR 71TQ	14.03	20.81
1638	88EU 70BC	11.34	71.71	1688	88RT	9.30	183.51
1639	88EB1 86TH7	13.40	27.81	1689	88RV	10.00	132.91
1640	88EM1 75EU5	12.82	36.31	1690	88RK1 89UN9	10.00	132.91
1641	88ER1 75TY4	13.40	27.81	1691	88RM1	10.60	100.81
1642	88ER2 89SF10	13.70	24.21	1692	88RO1	17.90	3.51
1643	88FB 88FV2	13.06	32.51	1693	88RP1 78SK6	13.11	31.71
1644	88FJ 82BF3	13.90	22.11	1694	88RR2 80JD	13.77	23.41
1645	88GB	16.40	7.01	1695	88RD3 78TK	14.40	17.51
1646	88GH 72GH	11.76	59.11	1696	88RR3 78RF5	14.60	16.01
1647	88GS 84EF1	13.40	27.81	1697	88RU3	14.35	17.91
1648	88HF 80JF	12.40	44.01	1698	88RG4 76HE	12.90	35.01
1649	88JL 86XA	14.40	17.51	1699	88RN4 83EQ	12.90	35.01
1650	88JN	11.90	55.41	1700	88RR4 82BY2	12.90	35.01

ID/2 No.	Provisional Designation	H	Input D
1701	88RA5 57SA	12.90	35.01
1702	88RF5 79QW8	11.20	76.51
1703	88RQ5 64TF1	13.10	31.91
1704	88RT6 71HV	12.90	35.01
1705	88RU6 79OL	13.53	26.21
1706	88RF7 88RL7	13.40	27.81
1707	88RF9 77DL	14.40	17.51
1708	88RL9 88PO4	13.60	25.31
1709	U323 88RG10	11.70	60.81
1710	U326 88RL10	12.40	44.01
1711	U332 88RN10	12.70	38.31
1712	U314 88RO10	13.30	29.11
1713	U306 88RR10	13.40	27.81
1714	U328 88RS10	12.30	46.11
1715	U239 88RY10	11.90	55.41
1716	U291 88RB11	13.90	22.11
1717	U290 88RH11	13.20	30.51
1718	88RK11 76UO20	15.40	11.11
1719	U297 88RM11	12.20	48.31
1720	U287 88RN11	12.30	46.11
1721	U282 88RX11	12.20	48.31
1722	U281 88RY11	12.70	38.31
1723	88RB12 72VG	14.90	13.91
1724	U267 88RD12	11.80	58.01
1725	U268 88RE12	14.10	20.11
1726	U273 88RH12	12.90	35.01
1727	U262 88RP12	12.70	38.31
1728	U235 88RS12	13.40	27.81
1729	U234 88RT12	12.80	36.61
1730	U225 88RV12	12.50	42.01
1731	U355 88RH13	12.10	50.51
1732	U357 88RL13	12.40	44.01
1733	88SM	17.90	3.51
1734	88SP 88RX6	13.84	22.71
1735	88SH1 81WD9	13.90	22.11
1736	U348 88SW1	12.10	50.51
1737	U238 88SK2	12.30	46.11
1738	88SO2 80EY1	13.81	23.01
1739	U255 88SP2	13.00	33.41
1740	U259 88SA3	12.70	38.31
1741	U368 88SG3	12.30	46.11
1742	U367 88SJ3	12.20	48.31
1743	U365 88SL3	12.30	46.11
1744	88TA	20.90	0.91
1745	88TD 69UM2	13.40	27.81
1746	88TQ 62XT1	13.40	27.81
1747	88TJ1	18.40	2.81
1748	88TO1 83XV	13.40	27.81
1749	88TP1 73UO3	12.30	46.11
1750	88TZ1	10.00	132.91
1751	88TC2 81UV17	13.90	22.11
1752	88TU2 54UM1	9.01	209.71
1753	88TV2	15.40	11.11
1754	88TA3 88RJ1	9.70	152.61
1755	88UB 78VM2	13.90	22.11
1756	88UJ 77TZ5	11.90	55.41
1757	88UP 82RX1	11.40	69.81
1758	88US 53TM2	13.40	27.81
1759	88UV 78UZ3	13.70	24.21
1760	88VB 74VL	12.40	44.01
1761	88VH 87KC	12.90	35.01
1762	88VJ 50QS	13.40	27.81
1763	88VL 54PD	12.40	44.01
1764	88VP 84WO	12.33	45.51
1765	88VR 73QE1	13.33	28.71
1766	88VT 84YL3	12.90	35.01
1767	88VD1 63SY	10.90	87.81
1768	88VF1 59RO	13.90	22.11
1769	88VH1 84YO2	13.40	27.81
1770	88VO1 80LQ	12.90	35.01
1771	88VM2 63TA1	13.50	26.51
1772	88VO2 51YB	12.90	35.01
1773	88VZ2 72YH	12.40	44.01
1774	88VB3 72TX3	12.00	52.91
1775	88VD3 73SH2	13.90	22.11
1776	88VM3 78NV4	14.30	18.31
1777	88VV3 75VC10	13.00	33.41
1778	88VZ3 81TV1	13.90	22.11
1779	88VK4 50RW	13.20	30.51
1780	88VN4	16.90	5.51
1781	88VP4	15.70	9.61
1782	88VS4 90KH	13.90	22.11
1783	88VB5 64WF	12.74	37.61
1784	88VD5 75TG4	12.40	44.01
1785	88VD7 81TL3	13.40	27.81
1786	88WB 78SB6	13.90	22.11
1787	88WC	13.70	24.21
1788	88WE 78YE	14.00	21.11
1789	88XB	17.40	4.41
1790	88XC 73AX3	12.90	35.01
1791	88XP 80TB	13.40	27.81
1792	88XR 69TF2	14.40	17.51
1793	88XT 81VH	13.63	25.01
1794	88XE1	12.40	44.01
1795	88XK1 73SP3	13.40	27.81
1796	88XO1	11.40	69.81
1797	88XW1 77SN3	12.40	44.01
1798	89AD 38UV	12.90	35.01
1799	89AG 79XN1	12.69	38.51
1800	89AH 82YB4	11.40	69.81

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1801	89AK 77VZ1	12.40	44.01	1851	89DA	17.90	3.51
1802	89AM 90KS	12.81	36.41	1852	89DJ 77EH2	9.40	175.21
1803	89AQ 76UF3	11.28	73.71	1853	89EC	12.90	35.01
1804	89AU 35YH	11.90	55.41	1854	89EL 87UG2	13.10	31.91
1805	89AZ	19.40	1.81	1855	89EM	13.47	26.91
1806	89AK1 71QN1	11.90	55.41	1856	89EV 73UH2	11.67	61.61
1807	89AN1 76GD6	12.40	44.01	1857	89EL1 76HF	12.18	48.71
1808	89AX1 41WO	13.00	33.41	1858	89EO1 66UK	13.56	25.81
1809	89AZ1 79UH3	12.10	50.51	1859	89EX1 50LB	13.27	29.51
1810	89AL2 75XN5	9.40	175.21	1860	89EL2 HH644	13.32	28.81
1811	89AM2 75XX3	9.40	175.21	1861	89EY2 80TY4	13.45	27.11
1812	89AN2 85TK3	9.90	139.21	1862	89EC3 77FE1	14.10	20.11
1813	89AL5 81UR3	12.13	49.81	1863	89EL6 70EY1	14.40	17.51
1814	89AZ5 56TA	12.90	35.01	1864	89EO11	9.90	139.21
1815	89AO6 87SQ14	11.40	69.81	1865	89FA 90OJ3	13.90	22.11
1816	89AW6 76UR7	14.40	17.51	1866	89FH 90SJ6	14.00	21.11
1817	89AY6 90OA4	13.70	24.21	1867	89FJ 70AK	11.90	55.41
1818	89AE7 82SQ10	12.70	38.31	1868	89FL 90QC9	13.50	26.51
1819	89BG 37BJ	13.10	31.91	1869	89GF 78JN1	12.90	35.01
1820	89BL 51YW	9.90	139.21	1870	89GM	12.40	44.01
1821	89BQ	9.94	136.61	1871	89GN 49MH	12.40	44.01
1822	89BT 78TP5	11.40	69.81	1872	89GO 81AF3	12.63	39.61
1823	89BY 78CP	12.69	38.51	1873	89GB1 72HN1	11.90	55.41
1824	89BA1 88VK6	12.90	35.01	1874	89GQ1 79TO2	15.00	13.31
1825	89BB1	10.40	110.61	1875	89GA3 70EJ3	14.40	17.51
1826	89BN1 71UO2	13.40	27.81	1876	89GB3 80BE6	13.90	22.11
1827	89BS1 55UC1	13.90	22.11	1877	89GR3 52JA	13.90	22.11
1828	89CA 80XV	13.40	27.81	1878	89GT3 80TF12	14.00	21.11
1829	89CM 89EG6	12.90	35.01	1879	89GU3 69AB1	13.50	26.51
1830	89CV 85QZ5	11.40	69.81	1880	89GB4 48TX1	12.40	44.01
1831	89CW 82BL10	13.40	27.81	1881	89GO4 85DE4	13.90	22.11
1832	89CZ 81YF	13.80	23.11	1882	89GP4 33SP1	14.40	17.51
1833	89CB1 74VA3	13.36	28.31	1883	89GT4 49SR1	13.90	22.11
1834	89CH1	11.90	55.41	1884	89GL5 32EY	11.40	69.81
1835	89CJ1	13.23	30.01	1885	89GP6 75XV6	12.25	47.21
1836	89CK1 86XM	9.40	175.21	1886	89JA	17.10	5.11
1837	89CL1 73FX	12.74	37.61	1887	89JK 83YA	13.00	33.41
1838	89CM1 69EY	12.40	44.01	1888	89KA 71DO1	13.50	26.51
1839	89CN1 76YX4	13.44	27.31	1889	89KB 79YB4	12.90	35.01
1840	89CW1 50TA1	9.90	139.21	1890	89KD 69AO	12.23	47.61
1841	89CY1 76UC10	13.64	24.91	1891	89KK 86WW2	12.67	38.91
1842	89CE2	13.40	27.81	1892	89LA 55QK1	12.90	35.01
1843	89CH2	9.90	139.21	1893	89LJ 80BK2	12.40	44.01
1844	89CS2 87SU5	14.40	17.51	1894	89LM 71BX3	13.57	25.71
1845	89CX2 81RX	13.00	33.41	1895	89LU 74HJ1	13.40	27.81
1846	89CL3 73TT	12.50	42.01	1896	89LW	13.40	27.81
1847	89CO3 69TX	14.40	17.51	1897	89ME 78QM	11.52	66.01
1848	89CD4 71UY1	13.90	22.11	1898	89ML	19.40	1.81
1849	89CH4 76UO2	13.40	27.81	1899	89NA	14.90	13.91
1850	89CU8 84DB2	12.40	44.01	1900	89NJ 67JA	12.90	35.01

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
1901	89NM 72JP	12.90	35.01	1951	89TC1 62WT	12.90	35.01
1902	89NO 85FJ	13.40	27.81	1952	89TH1 35QR	11.90	55.41
1903	89NR 86RD10	13.40	27.81	1953	89TP1 72VG1	11.80	58.01
1904	89NB1 49MG	11.07	81.21	1954	89TS1 72GL1	9.37	177.71
1905	89NE1	13.40	27.81	1955	U392 89TS2	11.20	76.51
1906	89NG1 74SY3	12.40	44.01	1956	89TU5 LU414	10.59	101.31
1907	89NH1 86TV1	14.90	13.91	1957	89TY10 89UJ8	14.80	14.61
1908	89OA 78LR	13.30	29.11	1958	C17 89TB11	12.80	36.61
1909	89OB	16.06	8.21	1959	U435 89TO11	9.90	139.21
1910	89OL	13.90	22.11	1960	U432 89TR11	13.00	33.41
1911	89PA	13.43	27.41	1961	U438 89TT11	12.40	44.01
1912	89PB	16.90	5.51	1962	89TG17 79YG6	11.60	63.61
1913	89PC	12.09	50.81	1963	89UA 81UN18	12.73	37.81
1914	89QE 31EN	10.76	93.71	1964	89UD 72TM1	11.80	58.01
1915	89QF	16.90	5.51	1965	89UM 77EL6	13.90	22.11
1916	89QG 51RE	12.67	38.91	1966	89UP	20.60	1.01
1917	89QL	12.90	35.01	1967	89UQ	18.90	2.21
1918	89QO	14.90	13.91	1968	89UR	17.90	3.51
1919	89RB 85SL5	13.90	22.11	1969	89US 34VK	13.40	27.81
1920	89RC	17.10	5.11	1970	89UY 55XF	11.76	59.11
1921	89RH 83EE4	12.90	35.01	1971	89UU1 31DV	12.90	35.01
1922	89RZ 59RH	12.90	35.01	1972	89UK2 86SX	13.40	27.81
1923	89RD1	13.40	27.81	1973	89UN2 88DE5	14.29	18.41
1924	89RS1	18.00	3.31	1974	89UT2 84LH	12.90	35.01
1925	89RB2 50DC	12.90	35.01	1975	89UG3 82BL3	13.40	27.81
1926	89RD2 78PD4	14.40	17.51	1976	89UL3 76YF1	11.90	55.41
1927	89RM2 67RD1	12.40	44.01	1977	89UO3 75VV	13.70	24.21
1928	89SA 81WN8	13.40	27.81	1978	89UR3 63SH	13.40	27.81
1929	89SB 79SZ5	14.15	19.71	1979	89UY3	13.90	22.11
1930	89SD 76JK3	14.40	17.51	1980	89UE4 85VK3	12.90	35.01
1931	89SE 81TN1	14.20	19.21	1981	89UR4 39BE	12.50	42.01
1932	89SG 89TV10	13.00	33.41	1982	89UZ4 69VX2	13.40	27.81
1933	89SH 36RQ	11.40	69.81	1983	U402 89UL5	11.40	69.81
1934	89SJ 78VY9	12.40	44.01	1984	U387 89UT5	12.90	35.01
1935	89SK 77UX	12.90	35.01	1985	U377 89UX5	10.60	100.81
1936	89SL 72RN1	13.40	27.81	1986	89UA7 49OW	14.90	13.91
1937	89SS 79VO2	11.70	60.81	1987	89UE7	12.40	44.01
1938	89SZ 88RN1	9.40	175.21	1988	89UF7 76GY4	13.60	25.31
1939	89SC1 48TM1	13.40	27.81	1989	89UB8 78UP3	12.60	40.11
1940	89SU1 75GH	13.40	27.81	1990	89UE8 89VS	12.90	35.01
1941	89SZ1 85JU	14.40	17.51	1991	89UK8 31UL	11.40	69.81
1942	89SA3 84YQ3	12.90	35.01	1992	89VA	16.90	5.51
1943	89SG5 50HC	13.70	24.21	1993	89VB	19.90	1.41
1944	89SL5	16.90	5.51	1994	89VK 38UX	14.80	14.61
1945	89SC7 90VE8	9.89	139.81	1995	89VM 71QD1	11.40	69.81
1946	89SO8 77LZ	12.40	44.01	1996	89VP 80UA1	11.40	69.81
1947	89TD 82TN1	14.90	13.91	1997	89VQ 74VE	13.60	25.31
1948	89TE 82TB	14.40	17.51	1998	89VR 69TF6	12.40	44.01
1949	89TS 71VJ	12.90	35.01	1999	89VV 81RU1	13.40	27.81
1950	89TB1 81CE	14.39	17.61	2000	89VX 78UE4	12.90	35.01

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2001	89VT1 79YS3	12.40	44.01	2051	89YG8 89YJ8	14.60	16.01
2002	89VC2 89TG2	12.40	44.01	2052	90BA	17.42	4.41
2003	89WB 76GK6	11.40	69.81	2053	90BF 40BB	13.30	29.11
2004	89WE 42BG	12.00	52.91	2054	90BG	13.90	22.11
2005	89WF 70GH2	12.40	44.01	2055	90BJ 83AD2	13.40	27.81
2006	89WK 48RE	12.50	42.01	2056	90BK 2789PL	12.40	44.01
2007	89WL 38BD	13.40	27.81	2057	90BM 89WS3	12.90	35.01
2008	89WR 72XN	13.90	22.11	2058	90BV 90BO2	13.40	27.81
2009	89WV 72AG	11.40	69.81	2059	90BW	13.90	22.11
2010	89WW 69VB3	14.40	17.51	2060	90BC1 80DC5	12.10	50.51
2011	89WX 31VB1	10.90	87.81	2061	90BG1 64WJ1	12.70	38.31
2012	89WZ 74TB	12.40	44.01	2062	90BH1 77AV2	13.40	27.81
2013	89WE1 76HJ	11.40	69.81	2063	90BQ1 51RD2	11.40	69.81
2014	89WH1 80BN3	12.90	35.01	2064	90BR1 58TQ	12.60	40.11
2015	89WJ1 81RO	13.39	27.91	2065	90BT1 84YY2	11.96	53.91
2016	89WN1 78QG3	12.40	44.01	2066	90BZ1 GL5	12.35	45.01
2017	89WQ1	14.90	13.91	2067	90BJ2 76UR20	11.60	63.61
2018	89WV1 78WZ	13.40	27.81	2068	90BN2 77AF2	12.90	35.01
2019	89WB2 65AM1	13.20	30.51	2069	90CH 70SR	12.84	35.91
2020	89WC2 82BT	13.40	27.81	2070	90DA	14.90	13.91
2021	89WK2	13.40	27.81	2071	90DD 71BB	12.40	44.01
2022	89WL2	13.90	22.11	2072	90DJ 73GA	12.90	35.01
2023	89WU2 78XV	12.70	38.31	2073	90DM 74CN	11.40	69.81
2024	89WM3 42VD	12.90	35.01	2074	90DX 84WO3	12.90	35.01
2025	89WK4 73AX	14.80	14.61	2075	90DM1 73EH	13.40	27.81
2026	89WG7 76UV1	13.70	24.21	2076	90DD2 76GC2	14.60	16.01
2027	89XA 69UL	12.30	46.11	2077	90DK3 90DC	14.50	16.71
2028	89XB 78YD2	13.90	22.11	2078	90DM3 77LM	13.60	25.31
2029	89XC 86CX1	12.10	50.51	2079	90DR4 A08BH	11.40	69.81
2030	89XD 30XP	11.90	55.41	2080	90EA 75XK	14.20	19.21
2031	89XF 52YB	13.30	29.11	2081	90EC 55RO	11.90	55.41
2032	89XM 88RJ5	12.50	42.01	2082	90EJ2 75VT1	12.10	50.51
2033	89XO 85TA4	12.90	35.01	2083	90EX2 71SX2	13.40	27.81
2034	89XC1 62QB	12.30	46.11	2084	90EZ5 90GL	12.90	35.01
2035	89XD1 79WS3	15.00	13.31	2085	90FP	11.90	55.41
2036	89YB 81WL1	12.90	35.01	2086	90FR 86LJ1	12.92	34.61
2037	89YF 70EH1	12.90	35.01	2087	90FS 70JC	12.41	43.81
2038	89YH 84YF1	12.44	43.21	2088	90FT 78CF	10.77	93.21
2039	89YK 73AV1	13.40	27.81	2089	90FC1 75TL6	11.40	69.81
2040	89YN 48UD	12.90	35.01	2090	90FM1 76GM6	12.40	44.01
2041	89YP 27DA	12.45	43.01	2091	90FP1 42ES	12.90	35.01
2042	89YR 85VW3	13.40	27.81	2092	90FS1 82KP1	12.25	47.21
2043	89YT 31RE1	13.30	29.11	2093	90FT1 A15DB	12.90	35.01
2044	89YH1 79FP1	13.53	26.21	2094	90FW1 75JL	13.90	22.11
2045	89YZ1 32YO	11.90	55.41	2095	90GS 74HZ	14.40	17.51
2046	89YA2 80PZ1	13.90	22.11	2096	90HA	16.90	5.51
2047	89YF5 82BN2	12.20	48.31	2097	90HR 86VZ5	11.30	73.01
2048	89YP5 82ES9	13.40	27.81	2098	90HF1 83ET2	10.40	110.61
2049	89YU5 40RA1	14.70	15.31	2099	90HM1 90JJ1	11.40	69.81
2050	89YH7 75XL6	13.90	22.11	2100	90KA	15.90	8.81

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2101	90KG 85BJ	12.40	44.01	2151	HH201 90QW3	15.08	12.81
2102	90KK	13.90	22.11	2152	HH203 90QY3	13.10	31.91
2103	90KL	13.40	27.81	2153	HH283 90QM4	13.80	23.11
2104	90KO	13.90	22.11	2154	HH275 90QN4	12.40	44.01
2105	90KB1 52PA	12.90	35.01	2155	HH299 90QV4	12.20	48.31
2106	90LA 52HZ	12.40	44.01	2156	HH334 90QV5	14.40	17.51
2107	90MA	14.40	17.51	2157	HH280 90QD6	13.47	26.91
2108	D1 90MB	16.00	8.41	2158	90RB 79OR7	11.90	55.41
2109	90ME 73QU1	11.90	55.41	2159	90SA	16.91	5.51
2110	90MF	18.60	2.51	2160	90SB	13.90	22.11
2111	90MJ	13.40	27.81	2161	90SK	14.00	21.11
2112	90MN 50NU	13.90	22.11	2162	90SM	16.40	7.01
2113	90MU	14.90	13.91	2163	90SP	16.90	5.51
2114	90MV 80WA2	12.80	36.61	2164	90SQ	12.50	42.01
2115	90MX 62JE	13.40	27.81	2165	90SS	18.40	2.81
2116	90OA	17.00	5.31	2166	HH373 90SW	13.40	27.81
2117	90OB 52UN1	11.50	66.61	2167	HH357 90SA1	12.80	36.61
2118	90OE 74VX	12.50	42.01	2168	HH364 90SH1	13.50	26.51
2119	90OH	13.30	29.11	2169	90SZ1 81AL1	12.10	50.51
2120	90OL	16.10	8.01	2170	90SA2 83RA1	14.40	17.51
2121	90OO 80PD2	11.90	55.41	2171	HH390 90SM2	12.20	48.31
2122	90OS	19.90	1.41	2172	90SW3 81WU7	12.00	52.91
2123	90OX 75GA1	11.90	55.41	2173	90SB4 A01DA	12.00	52.91
2124	90OA1	11.70	60.81	2174	90SK4 77KU1	13.50	26.51
2125	90OF1	11.50	66.61	2175	90SN4 86TG6	12.40	44.01
2126	HH140 90OK1	13.50	26.51	2176	HH537 90SU10	12.66	39.01
2127	HH107 90OE2	12.40	44.01	2177	90TB 69PP	13.90	22.11
2128	HH110 90OJ2	13.70	24.21	2178	90TF 68QS	13.50	26.51
2129	HH91 90OB4	13.60	25.31	2179	90TJ 78UP	14.00	21.11
2130	HH101 90OD4	11.50	66.61	2180	90TN 68US2	13.00	33.41
2131	HH175 90OH4	12.90	35.01	2181	90TR	14.50	16.71
2132	HH163 90OL4	14.10	20.11	2182	90TS 63TD1	13.70	24.21
2133	HH174 90OE5	13.10	31.91	2183	90TU 85VW2	12.30	46.11
2134	90PA 83EB3	11.50	66.61	2184	90TX 65UE2	13.80	23.11
2135	90QF 87SL25	13.90	22.11	2185	90TE1	13.20	30.51
2136	90QJ 70AV	11.20	76.51	2186	90TG1	15.00	13.31
2137	90QL 88BW4	13.90	22.11	2187	90TK1 75VU4	12.00	52.91
2138	90QQ 89BY1	12.90	35.01	2188	90TL1 76UT	13.80	23.11
2139	90QC1 49OL	13.10	31.91	2189	90TN1 86AS2	13.50	26.51
2140	HH206 90QH1	13.40	27.81	2190	90TJ2 69UK2	12.40	44.01
2141	HH199 90QP1	13.90	22.11	2191	90TZ2 38DY1	13.00	33.41
2142	HH198 90QQ1	12.50	42.01	2192	90TG3 31BK	12.70	38.31
2143	HH209 90QS1	12.96	34.01	2193	90TN4 82JF	12.00	52.91
2144	HH231 90QA2	13.60	25.31	2194	90TO4 82XJ3	14.50	16.71
2145	HH227 90QC2	14.40	17.51	2195	90UA	19.40	1.81
2146	HH216 90QD2	13.90	22.11	2196	90UD 34TC	13.50	26.51
2147	HH255 90QP2	12.60	40.11	2197	90UE 69JG	13.20	30.51
2148	HH256 90QT2	14.37	17.81	2198	90UF 77EQ6	12.80	36.61
2149	HH240 90QY2	13.70	24.21	2199	90UH 74HC2	12.90	35.01
2150	HH245 90QL3	13.60	25.31	2200	90UJ 78RW10	13.00	33.41

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
2201	90UN	23.50	0.31	2251	2527PL 77SY	13.13	31.41
2202	90UO	20.50	1.11	2252	2532PL 87QW9	13.10	31.91
2203	90UP	20.50	1.11	2253	2533PL 76SQ1	15.25	11.81
2204	90UQ	17.50	4.21	2254	2538PL 81UB15	13.62	25.11
2205	90UW 83RQ1	12.90	35.01	2255	2541PL HH642	14.92	13.81
2206	90UY 71BN2	12.00	52.91	2256	2546PL 79GD	14.40	17.51
2207	90UE1 75VU8	13.70	24.21	2257	2547PL 89UM7	14.10	20.11
2208	90UK1 80WK1	14.30	18.31	2258	2548PL 86EU5	12.40	44.01
2209	90UH2 81TT2	13.50	26.51	2259	2550PL 78WT11	15.40	11.11
2210	90UJ2 81QB2	13.30	29.11	2260	2557PL 90FN1	13.70	24.21
2211	90UR2 69AN	11.80	58.01	2261	2558PL 73AY3	12.66	39.01
2212	90UD3 81WB	13.50	26.51	2262	2562PL 41DE	12.92	34.61
2213	90UE3 74DH2	12.00	52.91	2263	2563PL 78WA6	12.40	44.01
2214	90UF3 31AL	13.00	33.41	2264	2566PL 81EF41	15.40	11.11
2215	90UL3	15.00	13.31	2265	2570PL 3319T3	12.90	35.01
2216	90VA	20.00	1.31	2266	2572PL 72GR1	15.10	12.71
2217	90VB	16.00	8.41	2267	2574PL 2368T3	13.40	27.81
2218	90VZ 39EE	13.10	31.91	2268	2594PL 790E1	14.30	18.31
2219	90VK1 80TW11	12.40	44.01	2269	2604PL 84GB	14.40	17.51
2220	90VV1 82UO	13.70	24.21	2270	2630PL 79TP2	14.46	17.01
2221	90VV2 33UC1	14.60	16.01	2271	2636PL 88PN	14.90	13.91
2222	90VG3 82DX6	14.20	19.21	2272	2642PL 76KP	13.95	21.61
2223	90VO3 58TD1	12.30	46.11	2273	2647PL 86TE6	14.50	16.71
2224	90WA	16.00	8.41	2274	2666PL 4081T3	16.30	7.31
2225	2012PL 87SN6	14.80	14.61	2275	2678PL 88CP7	15.90	8.81
2226	2017PL 80TT6	14.64	15.71	2276	2716PL 89TX3	16.60	6.41
2227	2018PL 81TH1	13.90	22.11	2277	2740PL 3223T2	15.70	9.61
2228	2019PL 83EP	14.00	21.11	2278	2765PL 78WS1	16.00	8.41
2229	2023PL 87SL12	12.90	35.01	2279	2768PL 3188T3	14.60	16.01
2230	2024PL 76JQ7	14.10	20.11	2280	2777PL 89GQ	13.85	22.61
2231	2037PL 81EC37	13.38	28.01	2281	2780PL 74SG3	12.40	44.01
2232	2040PL 2220T2	16.40	7.01	2282	2785PL 3185T3	15.30	11.61
2233	2041PL 1290T2	14.40	17.51	2283	2796PL 4346T3	15.70	9.61
2234	2050PL 75WT	13.90	22.11	2284	2799PL 5180T3	15.00	13.31
2235	2055PL 77EK5	15.10	12.71	2285	2808PL 77DB5	14.90	13.91
2236	2064PL 89WV4	13.40	27.81	2286	3005PL 89EH3	13.90	22.11
2237	2079PL LU299	13.62	25.11	2287	3016PL 5465T2	13.81	23.01
2238	2091PL 78WR13	15.70	9.61	2288	3034PL 84FH2	12.20	48.31
2239	2093PL 76UG9	13.00	33.41	2289	3040PL 77PS1	14.02	20.91
2240	2098PL 90UM1	13.00	33.41	2290	3051PL 76JT6	13.40	27.81
2241	2103PL 76JN1	13.90	22.11	2291	3066PL 78TK6	13.20	30.51
2242	2110PL 76JJ6	14.90	13.91	2292	3074PL 81UM2	12.60	40.11
2243	2113PL 2001T2	15.40	11.1[illegible]	2293	3083PL 82KY	13.70	24.21
2244	2121PL 2215T3	15.90	8[illegible]	2294	3097PL 78NH1	13.90	22.11
2245	2164PL 90TA10	15.00	13.31	2295	3109PL 88DU1	13.90	22.11
2246	2196PL 89BL1	14.40	17.51	2296	3509PL 88EA	15.50	10.61
2247	2208PL 2146T3	15.90	8.81	2297	3523PL 58DJ1	12.40	44.01
2248	2221PL 79MW7	16.90	5.51	2298	3535PL 81AB4	13.30	29.11
2249	2506PL 1183T2	14.74	15.01	2299	3538PL 87RA	14.90	13.91
2250	2514PL 2267T2	15.90	8.81	2300	3553PL 90ED1	13.72	24.01

ID/2 No.	Provisional Designation	H	Input D
2301	3557PL 89BM1	13.90	22.11
2302	4004PL 87YH5	14.50	16.71
2303	4015PL 90OZ3	14.90	13.91
2304	4017PL 78TG6	14.40	17.51
2305	4018PL 89UV	13.40	27.81
2306	4024PL HH495	14.04	20.71
2307	4027PL 87SU18	11.90	55.41
2308	4028PL 81WH9	13.90	22.11
2309	4031PL 82TE1	14.90	13.91
2310	4041PL 82VF11	15.30	11.61
2311	4060PL 2229T2	14.40	17.51
2312	4063PL 81EH44	15.84	9.01
2313	4066PL 90TY11	16.00	8.41
2314	4068PL 86QM2	14.40	17.51
2315	4069PL 74HQ	13.50	26.51
2316	4075PL 81EC41	15.70	9.61
2317	4077PL 51ED	15.00	13.31
2318	4081PL 80PF1	14.80	14.61
2319	4089PL 87QX3	13.90	22.11
2320	4113PL 81EQ25	14.43	17.31
2321	4116PL 86RL1	14.90	13.91
2322	4119PL 89RZ1	15.30	11.61
2323	4127PL 3086T3	14.61	15.91
2324	4206PL 81QQ3	15.10	12.71
2325	4226PL 77EY7	15.40	11.11
2326	4247PL 89GC2	14.40	17.51
2327	4257PL 78RG8	16.10	8.01
2328	4274PL 90EC4	15.90	8.81
2329	4276PL 89GX1	15.90	8.81
2330	4314PL 78SU6	14.40	17.51
2331	4511PL 4194T3	17.30	4.61
2332	4517PL 81TZ2	13.40	27.81
2333	4523PL 77CE1	10.40	110.61
2334	4537PL 90TW1	16.40	7.01
2335	4550PL 90TU3	16.50	6.71
2336	4577PL 90QK1	12.90	35.01
2337	4580PL 86WE3	13.90	22.11
2338	4581PL 87VZ	14.18	19.41
2339	4594PL 81EU32	12.13	49.81
2340	4598PL 88RD2	13.40	27.81
2341	4600PL 88RG11	12.60	40.11
2342	4601PL 76YN	13.40	27.81
2343	4611PL 90TD10	14.50	16.71
2344	4636PL 2283T3	13.40	27.81
2345	4641PL 82QW	13.90	22.11
2346	4657PL 76SD6	13.30	29.11
2347	4665PL 79SM7	14.40	17.51
2348	4667PL 87RM6	13.50	26.51
2349	4805PL 81EP22	15.09	12.81
2350	4806PL 3257T3	14.90	13.91
2351	4817PL 81EE41	15.70	9.61
2352	4821PL 4186T2	16.00	8.41
2353	4831PL 2013T3	14.90	13.91
2354	4848PL 81EG43	15.40	11.11
2355	4874PL 90SU7	15.00	13.31
2356	5016PL 2198T2	15.90	8.81
2357	5023PL 85QK2	15.40	11.11
2358	5557PL 74CS	13.60	25.31
2359	5565PL 89SB2	14.40	17.51
2360	5568PL 77RY	13.94	21.71
2361	6012PL 2250T3	14.70	15.31
2362	6034PL 85TG1	14.09	20.21
2363	6035PL 2125T2	13.82	22.91
2364	6040PL 57WW	14.10	20.11
2365	6045PL 71CG	12.90	35.01
2366	6048PL 87SE5	13.40	27.81
2367	6053PL 3111T3	14.40	17.51
2368	6073PL 81ER19	14.23	18.91
2369	6097PL 89RN4	15.40	11.11
2370	6193PL 2271T2	15.40	11.11
2371	6214PL 82VW7	14.90	13.91
2372	6217PL 80GG1	14.50	16.71
2373	6242PL 89EF4	14.40	17.51
2374	6245PL 3414T3	14.40	17.51
2375	6297PL 1095T3	15.90	8.81
2376	6299PL 81EG38	14.32	18.21
2377	6313PL 81ED46	15.20	12.11
2378	6372PL 78WP1	14.90	13.91
2379	6519PL 73DQ	13.10	31.91
2380	6531PL 3007T2	14.90	13.91
2381	6541PL 77CC1	11.40	69.81
2382	6543PL 74CD	12.43	43.41
2383	6547PL 79SW9	14.24	18.91
2384	6552PL 84SA6	13.90	22.11
2385	6555PL 77GB	12.90	35.01
2386	6564PL 71QH	12.30	46.11
2387	6568PL 86EV	14.40	17.51
2388	6573PL 4156T3	13.40	27.81
2389	6575PL 72TD7	11.90	55.41
2390	6577PL GL27	13.94	21.71
2391	6581PL 90DY1	9.90	139.21
2392	6582PL 85DF4	12.71	38.21
2393	6591PL 79GB	11.40	69.81
2394	6600PL 3148T2	15.00	13.31
2395	6602PL 3126T2	16.50	6.71
2396	6607PL 90QP7	14.50	16.71
2397	6608PL 2295T3	15.90	8.81
2398	6624PL 78WQ2	15.90	8.81
2399	6626PL 76EZ	14.40	17.51
2400	6647PL 75SY	14.68	15.41

ID/2 No.	Provisional Designation		H	Input D	ID/2 No.	Provisional Designation		H	Input D
2401	6676PL	89GF6	14.40	17.51	2451	1188T2	2423T3	13.40	27.81
2402	6726PL	90QV1	13.80	23.11	2452	1212T2	78SX1	12.50	42.01
2403	6743PL	83TF2	17.40	4.41	2453	1218T2	81YJ1	13.90	22.11
2404	6766PL	4243T3	11.92	54.91	2454	1246T2	72HY	12.74	37.61
2405	6787PL	75EM5	14.70	15.31	2455	1251T2	81EU	13.40	27.81
2406	6792PL	90SE7	14.00	21.11	2456	1260T2	6387PL	14.40	17.51
2407	6837PL	89TT3	15.30	11.61	2457	1262T2	2841PL	15.90	8.81
2408	7063PL	74OC1	14.10	20.11	2458	1269T2	81EP24	13.90	22.11
2409	7068PL	82SO8	13.90	22.11	2459	1304T2	68UG3	12.82	36.31
2410	7072PL	89GW	15.40	11.11	2460	1309T2	51SN	12.53	41.51
2411	7571PL	39EK	12.99	33.51	2461	1317T2	3731T3	16.40	7.01
2412	7590PL	4198T2	16.50	6.71	2462	1324T2	72GQ1	13.90	22.11
2413	7604PL	85GD	13.72	24.01	2463	1331T2	78WS8	14.90	13.91
2414	7606PL	78WJ7	16.60	6.41	2464	1335T2	90TG7	14.00	21.11
2415	7607PL	82VH5	15.40	11.11	2465	1344T2	90EO5	13.40	27.81
2416	7618PL	72XR1	12.40	44.01	2466	1352T2	3088T3	13.90	22.11
2417	7622PL	90TL	14.50	16.71	2467	1493T2	81EM21	14.40	17.51
2418	7633PL	77DR3	13.44	27.31	2468	2040T2	81EM42	14.70	15.31
2419	7643PL	4118T2	15.50	10.61	2469	2045T2	76GN1	12.82	36.31
2420	9073PL	77RQ5	12.70	38.31	2470	2083T2	76GJ5	12.90	35.01
2421	9086PL	80RM1	16.90	5.51	2471	2086T2	65DD	12.88	35.31
2422	9099PL	4300T3	13.70	24.21	2472	2092T2	6385PL	13.90	22.11
2423	9507PL	84SV6	10.40	110.61	2473	2108T2	87QB3	14.70	15.31
2424	9508PL	86ED1	12.90	35.01	2474	2114T2	38DS1	14.10	20.11
2425	9509PL	2142T2	15.00	13.31	2475	2137T2	79MO1	16.40	7.01
2426	9511PL	78VK11	12.99	33.51	2476	2145T2	88DZ1	14.30	18.31
2427	9515PL	85TY	14.40	17.51	2477	2150T2	68ON	13.50	26.51
2428	9519PL	78NL7	14.90	13.91	2478	2151T2	78NH6	13.90	22.11
2429	9521PL	74VN	14.40	17.51	2479	2155T2	79KP	14.90	13.91
2430	9535PL	78RC10	14.90	13.91	2480	2160T2	62WB2	12.80	36.61
2431	9540PL	89TV1	13.40	27.81	2481	2168T2	78SS	13.85	22.61
2432	9546PL	76PG	11.40	69.81	2482	2170T2	88FG3	13.90	22.11
2433	9570PL	4289T2	15.00	13.31	2483	2181T2	90OP4	13.20	30.51
2434	9602PL	77CM	12.40	44.01	2484	2200T2	68DO	13.70	24.21
2435	1010T2	89XG	11.00	83.91	2485	2216T2	HH634	13.19	30.61
2436	1038T2	6294PL	17.30	4.61	2486	2222T2	77EV4	11.60	63.61
2437	1041T2	83RK8	13.40	27.81	2487	2224T2	78RC2	13.22	30.21
2438	1050T2	81EY21	12.90	35.01	2488	2225T2	3087T3	14.90	13.91
2439	1051T2	80FD	12.90	35.01	2489	2249T2	81CA1	12.50	42.01
2440	1053T2	HH596	14.00	21.11	2490	2257T2	3028T3	14.90	13.91
2441	1063T2	88XF1	14.40	17.51	2491	2272T2	75EJ	13.40	27.81
2442	1105T2	82XA4	14.40	17.51	2492	2277T2	78VA10	14.40	17.51
2443	1107T2	78VA2	13.90	22.11	2493	2285T2	87RE6	13.40	27.81
2444	1133T2	76GS5	12.40	44.01	2494	2304T2	81EE24	14.90	13.91
2445	1139T2	81EZ34	14.40	17.51	2495	2314T2	89GP3	14.60	16.01
2446	1159T2	88EN1	12.90	35.01	2496	2315T2	78WU10	16.10	8.01
2447	1167T2	78VA7	15.20	12.11	2497	3020T2	78SG7	13.40	27.81
2448	1169T2	89YC2	13.90	22.11	2498	3025T2	75EY4	14.90	13.91
2449	1173T2	81EF40	14.90	13.91	2499	3033T2	89YV3	13.40	27.81
2450	1179T2	3217T3	14.90	13.91	2500	3060T2	3317T3	14.90	13.91

ID/2 No.	Provisional Designation		H	Input D	ID/2 No.	Provisional Designation		H	Input D
2501	3067T2	79MN6	14.90	13.91	2551	5482T2	80TZ4	14.40	17.51
2502	3076T2	84SL6	12.40	44.01	2552	5485T2	82AJ	13.90	22.11
2503	3088T2	78WY2	15.90	8.81	2553	5493T2	89CT6	10.40	110.61
2504	3099T2	87EG	11.90	55.41	2554	1017T3	86RZ2	12.90	35.01
2505	3102T2	82SY9	12.50	42.01	2555	1076T3	89EB5	14.01	21.01
2506	3129T2	88NB	13.40	27.81	2556	1078T3	3120PL	14.40	17.51
2507	3137T2	71FQ	12.40	44.01	2557	1081T3	89LF	12.90	35.01
2508	3145T2	61CW	13.90	22.11	2558	1119T3	LU378	14.93	13.71
2509	3159T2	HH583	14.03	20.81	2559	1120T3	88CB2	13.90	22.11
2510	3189T2	3180T3	16.40	7.01	2560	1128T3	4192PL	13.40	27.81
2511	3211T2	82DU3	13.80	23.11	2561	1142T3	89YH3	13.40	27.81
2512	3212T2	4385T3	15.40	11.11	2562	1182T3	90EM4	13.90	22.11
2513	3233T2	A23VD	11.57	64.51	2563	1214T3	87RD	12.40	44.01
2514	3236T2	72HJ	13.22	30.21	2564	2035T3	88RW	11.90	55.41
2515	3262T2	34NG	12.69	38.51	2565	2041T3	82UL6	12.40	44.01
2516	3269T2	87SY9	14.90	13.91	2566	2078T3	79BH1	12.90	35.01
2517	3282T2	3082T3	15.40	11.11	2567	2141T3	81WX6	13.90	22.11
2518	3285T2	82BE6	13.90	22.11	2568	2158T3	86LN1	14.40	17.51
2519	3288T2	82DK3	13.80	23.11	2569	2203T3	5012PL	13.40	27.81
2520	3289T2	83QN	13.40	27.81	2570	2287T3	HH482	13.44	27.31
2521	3290T2	90SQ9	13.00	33.41	2571	2318T3	82VZ3	13.40	27.81
2522	3306T2	89SW3	16.18	7.71	2572	2390T3	72GC2	13.85	22.61
2523	3347T2	89AV5	15.30	11.61	2573	2400T3	89YE1	13.25	29.81
2524	4053T2	76GY7	12.90	35.01	2574	2416T3	88UD	12.90	35.01
2525	4068T2	78WR6	15.40	11.11	2575	2480T3	83DG	13.40	27.81
2526	4069T2	69VA3	12.90	35.01	2576	2496T3	86LV	12.90	35.01
2527	4129T2	86GR	14.90	13.91	2577	2610T3	90ES5	14.90	13.91
2528	4136T2	87KV1	13.40	27.81	2578	2672T3	81ES45	12.90	35.01
2529	4170T2	790K	13.60	25.31	2579	3006T3	87VA	13.01	33.21
2530	4171T2	4386T3	15.40	11.11	2580	3019T3	86RT	12.90	35.01
2531	4216T2	89TP2	12.40	44.01	2581	3045T3	89UT1	11.33	72.01
2532	4239T2	83R08	13.55	25.91	2582	3100T3	3704T2	14.90	13.91
2533	4240T2	88WD	15.40	11.11	2583	3104T3	89SS4	10.40	110.61
2534	4254T2	88VJ5	13.90	22.11	2584	3105T3	88RS8	14.90	13.91
2535	4265T2	89UB1	11.84	57.01	2585	3107T3	72VZ	11.90	55.41
2536	4314T2	62XR1	14.66	15.51	2586	3108T3	41UB	11.26	74.41
2537	5006T2	75BM	13.10	31.91	2587	3134T3	80PP2	14.40	17.51
2538	5030T2	89EN4	11.90	55.41	2588	3164T3	HH556	13.47	26.91
2539	5061T2	86PF4	14.90	13.91	2589	3166T3	90EV4	15.40	11.11
2540	5065T2	1060T3	15.40	11.11	2590	3197T3	88VE5	12.90	35.01
2541	5066T2	82YF2	13.10	31.91	2591	3241T3	87RM5	14.50	16.71
2542	5069T2	78VQ10	13.72	24.01	2592	3264T3	LU44	14.65	15.61
2543	5104T2	81EN32	14.90	13.91	2593	3360T3	LU15	15.01	13.21
2544	5141T2	78QK3	12.64	39.41	2594	3381T3	LU231	15.62	10.01
2545	5148T2	87SS14	13.90	22.11	2595	3453T3	90EQ4	14.90	13.91
2546	5161T2	88CG1	13.70	24.21	2596	3474T3	53FB1	13.80	23.11
2547	5162T2	89RR3	11.90	55.41	2597	3502T3	79GH	16.50	6.71
2548	5187T2	89ER2	11.20	76.51	2598	4008T3	89LP	13.70	24.21
2549	5332T2	81ES6	14.40	17.51	2599	4017T3	82BN4	14.40	17.51
2550	5447T2	90EH2	14.60	16.01	2600	4035T3	88SF2	12.03	52.21

ID/2 No.	Provisional Designation	H	Input D	ID/2 No.	Provisional Designation	H	Input D
2601	4045T3 90BP	13.40	27.81				
2602	4046T3 90HL	14.40	17.51				
2603	4059T3 85R04	12.90	35.01				
2604	4071T3 82BA7	14.90	13.91				
2605	4074T3 89YV1	14.40	17.51				
2606	4086T3 90SD7	16.50	6.71				
2607	4092T3 88CM5	13.02	33.11				
2608	4094T3 89SB5	15.20	12.11				
2609	4101T3 89TF6	11.40	69.81				
2610	4118T3 80FL2	13.40	27.81				
2611	4134T3 86TC4	14.20	19.21				
2612	4157T3 89BH1	14.40	17.51				
2613	4171T3 64VL2	13.98	21.31				
2614	4179T3 89UB6	11.70	60.81				
2615	4203T3 6183PL	14.40	17.51				
2616	4250T3 89YR7	14.90	13.91				
2617	4271T3 88TZ2	9.93	137.31				
2618	4317T3 88RK12	12.57	40.71				
2619	4327T3 88JT	14.40	17.51				
2620	4343T3 80LH	12.90	35.01				
2621	4369T3 88RF12	12.54	41.31				
2622	4379T3 89CB	13.90	22.11				
2623	5010T3 88RH1	9.94	136.61				
2624	5019T3 LU474	13.56	25.81				
2625	5041T3 87QA2	12.50	42.01				
2626	5111T3 89QP	14.50	16.71				
2627	5119T3 82FB2	13.40	27.81				
2628	5166T3 85QA	13.80	23.11				
2629	5174T3 70KE	12.10	50.51				
2630	5175T3 89YK6	14.50	16.71				
2631	5191T3 88RX	10.40	110.61				
2632	5193T3 80DV	13.00	33.41				

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Chapter 12

IMPS ALBEDOS AND DIAMETERS CATALOG (FP 102)

Edward F. Tedesco and Glenn J. Veeder

This catalog presents derived albedos and diameters, together with various other parameters useful for assessing their reliability, for all asteroids with multiple IRAS survey observations.

This catalog presents the averaged results for 1,796 numbered asteroids and 88 type 2 asteroids which have at least two final accepted band observations used. The results are collated by asteroid in ascending numerical order for asteroid types 1 and 2. Catalog entries include: identification number, name (or provisional designation if un-named) for asteroid type 1 and provisional designation for asteroid type 2, absolute magnitude (H), the average albedo and its one-sigma uncertainty (p_H and σp_H), the average diameter and its one-sigma uncertainty (D and σ_D), the probability that the results were influenced by light curve or aspect variations (PLC), the number of sightings used (US), the number of values averaged (UO), the fraction of predicted sightings which were observed (FOR), and the 32-bit OR'd status word AStatW.

Note that the format of the catalog presented here differs from that of the machine-readable data base documented in Table 13, page 154 in the order of the fields . This was done to improve readability.

This catalog contains one record per asteroid. If an asteroid is not listed here that means it does not have at least two accepted sightings. See the following chapter: *IMPS Singleton Catalog (FP 103)* for a list of asteroids which had only a single accepted IRAS sighting. In addition to albedos and diameters this catalog contains the uncertainties in each of these values, due solely to the measured uncertainties in the IRAS photometry, together with various other parameters useful for assessing the reliability of the adopted values.

12.1 IRAS Minor Planet Survey Asteroid Status Word

The Asteroid Status Word (AStatW) is a 32-bit code word generated for each sighting (whether accepted or rejected) as part of IMPS processing (*cf.*, IMPS Sightings Data Base, FP 108, available only as a machine-readable file). As such it is an important summary of various parameters for each sighting and also serves as a means for checking the disposition of each sighting throughout the IMPS processing.

Some flags are set if a sighting fails a particular acceptance criteria (*cf.*, §5.2.3). Others are set as a warning of a potential problem but no processing decisions are made based on these (*cf.*, §6.5.1). Table 23 gives a short description of each bit and the totals of accepted and rejected sightings that have each bit set. The last column is summed after performing a logical OR operation on the AStatW's for the accepted sightings of each asteroid. The notes following Table 23 provide additional information.

Table 23. IRAS Minor Planet Survey Asteroid Status Word (AStatW)

Bit	Description	Total ID 1&2	Reject ID 1&2	Accept ID 1&2	OR'd
1	Low position score	1024	947	77	72
2	ADAS type 1 accept	6274	570	5704	1562
3	ADAS type 1 reject	2679	1227	1452	828
4	WSDB HCON position match	7654	1290	6364	1714
5	WSDB MCON position match	396	396	0	0
6	Small Scale Ver. 1 match	18	3	15	8
7	Relative flux out of bounds	1039	419	620	250
8	IMPS asteroid association	11612	3402	8210	2004
9	Point Source Ver. 2 match	329	329	0	0
10	Outer slot detection only	937	937	0	0
11	Predicted flux < 0.14 Jy	45	45	0	0
12	Low detection rate FOR	448	161	287	231
13	12 μm albedo used	6042	0	6042	1573
14	25 μm albedo used	7849	0	7849	1999

Bit	Description	Total ID 1&2	Reject ID 1&2	Accept ID 1&2	OR'd
15	60 μm albedo used	5815	0	5815	1513
16	100 μm albedo used	0	0	0	0
17	Faint Source Ver. 2 match	152	152	0	0
18	25 μm flux < 1 Jy	5514	2700	2814	1106
19	Large albedo range	481	0	481	253
20	Serendipitous Ver. 1 match	36	36	0	0
21	-10° < Galactic latitude < 10°	1570	575	995	315
22	Galactic center match	87	62	25	14
23	ADAS type 2 now type 1	66	34	32	7
24	Flux correction used	4991	0	4991	1540
25	12 μm high density	301	170	131	56
26	25 μm high density	235	137	98	44
27	60 μm high density	354	170	184	78
28	100 μm high density	1902	655	1247	447
29	Always zero	0	0	0	0
30	2+ known asteroid match	13	4	9	8
31	2+ sightings match	89	89	0	0
32	Always zero	0	0	0	0

1. Set if the parameter {[$\log_{10}$(SCORE)-3]/6} is less than 0.5 (*cf.*, Chapter 4). Sightings with a value less than 0.4 are also rejected. This parameter is a measure of the difference between the predicted and observed positions for an asteroid association (*cf.*, Chapter 6, Fig. 22).

2. Set for all sightings of an asteroid with identification number less than 3318 which was accepted in ADAS (*Infrared Astronomical Satellite Asteroid and Comet Survey, 1986*).

3. Set for all sightings of an asteroid with identification number less than 3318 which was rejected in ADAS (*Infrared Astronomical Satellite Asteroid and Comet Survey, 1986*).

4. Set for HCON (hours confirmed WSDB reject) asteroid sighting.

5. All MCON (WSDB "weeks" or months confirmed) asteroid sightings are rejected by IMPS (*cf.*, AStatW bit number 9 and Chapter 5, Fig. 14).

6. Set to indicate resolved spatial structure (*cf., IRAS Small Scale Structure Catalog, 1986*).

7. Set if the ratio of observed to predicted flux density at 25 μm is either less than 0.3 or greater than 3.0 (*cf.*, Chapter 5, Fig. 7).

8. Set to unity for every asteroid sighting processed by IMPS.

9. All asteroid sightings confused with sources in the IRAS Point Source Catalog (*IRAS Explanatory Supplement, 1985*) are rejected by IMPS (subset of AStatW bit number 5; *cf.*, Chapter 5, Fig. 14).

10. All asteroid outer slot sightings are rejected by IMPS.

11. Set *a priori* for all candidate associations of an IMPS asteroid if no predicted flux density at 25 μm is greater than 0.14 Jansky.

12. Set for all sightings of each asteroid if the rate of successful detections (*i.e.*, the fraction observed ratio FOR [(number used in FPard)/(number used + number missed)] is less than 0.3 (*cf.*, Chapter 6, Figs. 20 and 21).

16. No 100 μm detections contribute to derived IMPS average values.

17. All asteroid sightings confused with sources in the IRAS Faint Source Survey (*IRAS Faint Source Survey, 1989*) are rejected by IMPS.

18. There are 1,267 accepted asteroids with no 25 μm observation of flux density greater than 1 Jansky used in their final IMPS derived average products (*cf.*, Chapter 5, Fig. 8).

19. Set for all sightings of an accepted asteroid if the ratio {[max-min]/[(max+min)/2]} is greater than 0.75 for all derived albedos used in the final IMPS average.

20. All asteroid sightings confused with sources in the IRAS Serendipitous Survey Catalog (*IRAS Serendipitous Survey Catalog, 1986*) are rejected by IMPS .

21. Set if sighting within the galactic plane, *i.e.*, not covered by the IRAS Faint Source Survey (*cf.*, AStatW bit number 17).

22. Asteroid 25 μm only sightings are rejected by IMPS if near the galactic center: ±3° latitude by ±10° longitude (subset of AStatW bit number 21).

23. Set if provisional asteroid elements updated and numbered since 1985.

24. Set if IMPS decreased (low) flux densities to compensate for IRAS bias near its SNR cutoff (*cf.*, Chapter 4).

25. Set if sighting within an IRAS 12 μm High Source Density Region (*IRAS Explanatory Supplement, 1985*) near the galactic center (*cf.*, AStatW bit number 26).

26. Set if sighting within an IRAS 25 μm High Source Density Region (*IRAS Explanatory Supplement, 1985*) near galactic center (*cf.*, AStatW bit number 25).

27. Set if sighting within an IRAS 60 μm High Source Density Region (*IRAS Explanatory Supplement, 1985*) of low galactic latitude near the center and anti-center.

28. Set if sighting within an IRAS 100 μm High Source Density Region (*IRAS Explanatory Supplement, 1985*) around the galactic center and anti-center.

29. Unset (zeroed) for every asteroid sighting processed by IMPS.

30. Set if sighting associated with more than one asteroid prediction.

31. Set if more than one source is associated with a single asteroid prediction and therefore rejected by IMPS.

32. Unset (zeroed) for every asteroid sighting processed by IMPS.

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1	Ceres	3.34	0.1132	0.005	848.40	19.7	0.10	6	15	1.00	.111...1	....111.	....	....
2	Pallas	4.13	0.1587	0.013	498.07	18.8	0.92	7	19	1.00	.1.1...1	....111.	....1...	...1....
3	Juno	5.33	0.2383	0.025	233.92	11.2	0.92	8	23	1.00	.1.1...1	....111.	....	....
4	Vesta	3.20	0.4228	0.053	468.30	26.7	0.10	1	2	1.00	.1.1...1	.....11.	....1...	....
5	Astraea	6.85	0.2268	0.027	119.07	6.5	0.68	3	9	1.00	.1.1...1	....111.	....	....
6	Hebe	5.71	0.2679	0.008	185.18	2.9	0.10	7	18	0.88	11.1...1	....111.	....1...	...1....
7	Iris	5.51	0.2766	0.030	199.83	10.0	0.91	6	18	1.00	.111...1	....111.	....11.1	11......
8	Flora	6.49	0.2426	0.008	135.89	2.3	0.10	7	19	1.00	.111...1	....111.	....	....
10	Hygiea	5.43	0.0717	0.002	407.12	6.8	0.10	9	22	1.00	.111...1	....111.	....	....
11	Parthenope	6.55	0.1803	0.007	153.33	3.1	0.45	4	11	1.00	.1.1...1	....111.	....1...	...1....
12	Victoria	7.24	0.1765	0.010	112.77	3.1	0.10	2	6	1.00	.1.1...1	....111.	....	....
13	Egeria	6.74	0.0825	0.007	207.64	8.3	0.10	1	3	1.00	.1.1...1	....111.	....	....
15	Eunomia	5.28	0.2094	0.027	255.34	15.0	0.99	7	21	1.00	.111...1	....111.	....	....
16	Psyche	5.90	0.1203	0.004	253.16	4.0	0.13	11	32	1.00	.1.1...1	....111.	....	....
17	Thetis	7.76	0.1715	0.015	90.04	3.7	0.91	4	10	1.00	.111...1	....111.	....	....
18	Melpomene	6.51	0.2225	0.009	140.57	2.8	0.10	5	15	0.83	.1.1...1	....111.	....	....
20	Massalia	6.50	0.2096	0.030	145.50	9.3	0.98	3	9	1.00	.1.1...1	....111.	....	....
21	Lutetia	7.35	0.2212	0.020	95.76	4.1	0.46	5	15	1.00	.1.1...1	....111.	....	....
22	Kalliope	6.45	0.1419	0.007	181.00	4.6	0.99	4	11	0.50	.111...1	....111.	....	....
23	Thalia	6.95	0.2536	0.011	107.53	2.2	0.10	6	16	1.00	.1.1...1	....111.	....	....
25	Phocaea	7.83	0.2310	0.024	75.13	3.6	0.82	8	21	1.00	1111...1	....111.	....	....
26	Proserpina	7.50	0.1955	0.007	95.07	1.6	0.10	7	19	1.00	.111...1	....111.	....	...1....
28	Bellona	7.09	0.1763	0.010	120.90	3.4	0.56	7	18	1.00	.1.1...1	....111.	....1...	....
29	Amphitrite	5.85	0.1793	0.012	212.22	6.8	0.65	4	11	1.00	.1.1...1	....111.	....	....
30	Urania	7.57	0.1668	0.006	99.66	1.8	0.10	5	14	1.00	.111...1	....111.	....	...1....
31	Euphrosyne	6.74	0.0543	0.005	255.90	11.5	0.74	7	19	1.00	.1.1...1	....111.	....	...1....
32	Pomona	7.56	0.2564	0.010	80.76	1.6	0.10	9	25	0.90	.1.1...1	....111.	....	...1....
34	Circe	8.51	0.0541	0.003	113.54	3.3	0.68	7	19	1.00	.1.1...1	....111.	....	...1....
35	Leukothea	8.50	0.0662	0.004	103.11	2.7	0.10	2	5	1.00	.1.1...1	....111.	....	....
36	Atalante	8.46	0.0654	0.005	105.61	4.0	0.49	2	6	1.00	.1.....1	....111.	....	....
37	Fides	7.29	0.1826	0.007	108.35	1.9	0.10	8	22	1.00	.1.1...1	....111.	....1...	...1....
38	Leda	8.32	0.0618	0.002	115.93	2.1	0.10	9	25	1.00	.1.1...1	....111.	....	....
39	Laetitia	6.10	0.2869	0.036	149.52	8.6	0.67	3	7	1.00	.111...1	....111.	....	...1....
40	Harmonia	7.00	0.2418	0.031	107.62	6.2	0.99	7	21	1.00	.1.1...1	....111.	....	....
41	Daphne	7.12	0.0828	0.012	174.00	11.7	0.90	3	8	1.00	.111...1	....111.	....1...	....
42	Isis	7.53	0.1712	0.012	100.20	3.4	0.10	2	4	1.00	.1.1...1	....111.	....1...	....
43	Ariadne	7.93	0.2740	0.022	65.88	2.5	0.10	1	3	1.00	1	....111.	....	....
44	Nysa	7.03	0.5458	0.067	70.64	4.0	0.99	6	18	1.00	.1.1...1	....111.	....	....
45	Eugenia	7.46	0.0398	0.002	214.63	4.2	0.10	7	19	1.00	.111...1	....111.	....	....
46	Hestia	8.36	0.0519	0.003	124.14	3.6	0.98	3	8	1.00	.1.1...1	....111.	....	....
47	Aglaja	7.84	0.0801	0.011	126.96	7.7	0.98	7	20	1.00	.1.1...1	....111.	....	....
48	Doris	6.90	0.0624	0.004	221.81	7.5	0.38	4	10	1.00	.1.1...1	....111.	....	....
49	Pales	7.80	0.0597	0.003	149.80	3.8	0.10	2	5	1.00	.1.1...1	....111.	....	....
50	Virginia	9.24	0.0357	0.004	99.82	5.2	0.10	1	3	1.00	..1...11	....111.	....	....
51	Nemausa	7.35	0.0928	0.003	147.86	2.4	0.10	6	18	1.00	.1.1...1	....111.	....	....
52	Europa	6.31	0.0578	0.002	302.51	5.4	0.10	7	19	1.00	.1.1...1	....111.	....	....
53	Kalypso	8.81	0.0397	0.002	115.38	2.4	0.10	4	12	1.00	.1.1...1	....111.	....	....
54	Alexandra	7.66	0.0555	0.002	165.75	3.4	0.10	5	14	1.00	.1.1...1	....111.	....	....
55	Pandora	7.80	0.3013	0.028	66.70	2.9	0.21	3	9	1.00	.111...1	....111.	....	....
56	Melete	8.31	0.0653	0.002	113.24	1.7	0.10	9	26	1.00	.1.1...1	....111.	....	....

IMPS Albedos and Diameters

ID/1	Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
57	Mnemosyne	7.03	0.2149	0.011	112.59	2.8	0.10	2	5	1.00	.111...1	....111.	....	....
58	Concordia	8.86	0.0578	0.004	93.43	3.0	0.10	3	7	1.00	.1.1...1	....111.	1	....
59	Elpis	7.93	0.0438	0.003	164.80	6.0	0.90	5	14	1.00	.1.1...1	....111.	....	....
60	Echo	8.21	0.2535	0.016	60.20	1.8	0.13	2	6	1.00	.1.1...1	....111.	....	....
61	Danae	7.68	0.2224	0.025	82.04	4.3	0.99	8	18	0.80	.111...1	....111.	....1..1	1.11....
62	Erato	8.76	0.0608	0.003	95.39	2.0	0.10	5	15	1.00	.1.1...1	....111.	....1...	....
63	Ausonia	7.55	0.1586	0.008	103.14	2.4	1.00	2	5	1.00	.1.1...1	....111.	....	....
65	Cybele	6.62	0.0706	0.003	237.26	4.2	0.10	6	17	0.86	.1.1...1	....111.	....	....
66	Maja	9.36	0.0601	0.010	72.82	5.6	0.98	7	20	1.00	.111...1	....111.	....	....
67	Asia	8.28	0.2551	0.013	58.11	1.4	0.10	3	9	1.00	.1.1...1	....111.	....	....
68	Leto	6.78	0.2283	0.021	122.57	5.3	0.90	7	21	1.00	.111...1	....111.	....	....
69	Hesperia	7.05	0.1402	0.010	138.13	4.7	0.10	1	3	1.00	.1.....1	....111.	....1...	....
70	Panopaea	8.11	0.0675	0.003	122.17	2.3	0.10	4	12	1.00	.111...1	....111.	....	....
71	Niobe	7.30	0.3052	0.013	83.42	1.7	0.57	5	13	1.00	.1.1...1	....111.	....	....
72	Feronia	8.94	0.0633	0.005	86.11	3.1	0.43	8	24	1.00	.1.1...1	....111.	....1...	...1....
73	Klytia	9.00	0.2247	0.039	44.44	3.4	0.90	8	21	1.00	.111...1	....111.	....1..1	...1....
74	Galatea	8.66	0.0431	0.002	118.71	2.8	0.10	3	9	1.00	.1.1...1	....111.	....1...	...1....
75	Eurydike	8.96	0.1486	0.010	55.66	1.9	0.10	6	17	1.00	.1.1...1	....111.	1	....
76	Freia	7.90	0.0362	0.002	183.66	4.0	0.10	5	15	1.00	.111...1	....111.	....	....
77	Frigga	8.52	0.1440	0.009	69.25	2.1	0.10	5	12	0.83	.111...1	....111.	....1..1	..11....
78	Diana	8.09	0.0706	0.003	120.60	2.7	0.10	9	26	1.00	.1.1...1	....111.	....	....
79	Eurynome	7.96	0.2618	0.013	66.47	1.6	0.10	4	12	1.00	.1.1...1	....111.	....	....
80	Sappho	7.98	0.1848	0.008	78.39	1.7	0.63	11	29	1.00	.1.1...1	....111.	....	...1....
81	Terpsichore	8.48	0.0505	0.002	119.08	2.1	0.10	11	32	1.00	.111...1	....111.	....	..11....
82	Alkmene	8.40	0.2075	0.011	60.96	1.5	0.10	4	12	1.00	.1.1...1	....111.	1	....
83	Beatrix	8.66	0.0917	0.005	81.37	2.0	0.10	6	15	1.00	.1.1...1	....111.	....1...	1111....
84	Klio	9.32	0.0527	0.002	79.16	1.6	0.10	4	12	1.00	.111...1	....111.	....	....
85	Io	7.61	0.0666	0.003	154.79	3.8	0.10	3	8	1.00	.1.1...1	....111.	....	....
86	Semele	8.53	0.0471	0.003	120.56	3.3	0.66	4	11	1.00	.1.1...1	....111.	1	....
87	Sylvia	6.94	0.0435	0.005	260.94	13.3	0.92	7	20	0.78	.1.1...1	....111.	....	....
88	Thisbe	7.04	0.0671	0.003	200.57	5.0	0.10	2	5	1.00	..11..11	....111.	....	....
89	Julia	6.60	0.1764	0.007	151.46	3.1	0.18	4	10	0.80	.1.1...1	....111.	....	....
90	Antiope	8.27	0.0603	0.004	120.07	4.0	0.10	1	3	1.00	.1.....1	....111.	....	....
91	Aegina	8.84	0.0426	0.003	109.82	3.3	0.10	2	6	1.00	.1.1...1	....111.	....1...	....
92	Undina	6.61	0.2509	0.014	126.42	3.4	0.10	2	6	1.00	.1.1...1	....111.	....	....
93	Minerva	7.51	0.0881	0.005	140.97	4.0	0.10	2	6	1.00	.1.....1	....111.	....	....
94	Aurora	7.57	0.0395	0.001	204.89	3.6	0.10	6	16	1.00	.1.1...1	....111.	....	....
95	Arethusa	7.84	0.0698	0.012	136.04	10.1	0.99	7	21	1.00	.111...1	....111.	....	....
96	Aegle	7.67	0.0523	0.002	169.91	3.1	0.10	6	17	1.00	.1.1...1	....111.	....	....
97	Klotho	7.63	0.2285	0.027	82.83	4.5	0.75	7	18	1.00	.1.1...1	....111.	....1...	...1....
98	Ianthe	8.84	0.0471	0.002	104.45	1.8	0.10	8	23	1.00	.1.1...1	....111.	....1...	....
99	Dike	9.43	0.0577	0.004	71.93	2.4	0.18	2	6	1.00	..1...11	....111.	....	...1....
100	Hekate	7.67	0.1922	0.009	88.66	2.0	0.16	8	23	1.00	.1.1...1	....111.	....	....
101	Helena	8.33	0.1898	0.008	65.84	1.3	0.10	5	15	1.00	.1.1...1	....111.	....	....
102	Miriam	9.26	0.0507	0.002	83.00	1.9	0.10	5	14	1.00	.1.1...1	....111.	....	....
103	Hera	7.66	0.1833	0.025	91.20	5.6	0.95	9	25	1.00	.1.1...1	....111.	....	....
104	Klymene	8.27	0.0568	0.003	123.68	3.1	0.10	6	15	1.00	.1.1...1	....111.	....	....
105	Artemis	8.57	0.0465	0.002	119.08	2.8	0.10	3	9	1.00	.1.1...1	....111.	....	...1....
106	Dione	7.41	0.0893	0.003	146.59	2.8	0.10	6	17	1.00	.1.1...1	....111.	....	....
107	Camilla	7.08	0.0525	0.009	222.62	17.1	1.00	9	27	1.00	.111...1	....111.	....1...	...1....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
108	Hecuba	8.09	0.2431	0.037	64.97	4.4	0.53	5	14	1.00	.111...1	....111.	....1..1	...1....
109	Felicitas	8.75	0.0699	0.004	89.44	2.5	0.10	7	15	1.00	.111...1	....111.	....1..1	1111....
110	Lydia	7.80	0.1808	0.009	86.09	2.0	0.10	5	15	1.00	.1.1...1	....111.	1	....
111	Ate	8.02	0.0605	0.004	134.56	4.6	0.10	1	3	1.00	.1.....1	....111.	....	....
112	Iphigenia	9.84	0.0393	0.005	72.18	4.4	1.00	12	36	1.00	.1.1...1	....111.	....	...1....
113	Amalthea	8.74	0.2649	0.017	46.14	1.4	0.10	3	9	1.00	.1.1...1	....111.	....1...	....
114	Kassandra	8.26	0.0884	0.003	99.64	1.9	0.10	6	17	1.00	.1.1...1	....111.	....1...	....
115	Thyra	7.51	0.2747	0.010	79.83	1.4	0.10	6	17	1.00	.1.1...1	....111.	....	....
116	Sirona	7.82	0.2560	0.047	71.70	5.8	0.96	2	5	1.00	.1.....1	....111.	....	....
117	Lomia	7.95	0.0528	0.005	148.71	6.6	0.57	4	12	1.00	.1.1...1	....111.	....	....
118	Peitho	9.14	0.2240	0.017	41.73	1.5	0.10	11	32	1.00	.111...1	....111.	..1....1	...1....
119	Althaea	8.42	0.2306	0.010	57.30	1.1	0.10	6	17	0.75	.1.1...1	....111.	....1...	....
120	Lachesis	7.75	0.0463	0.002	174.10	2.9	0.10	6	15	1.00	.1.1...1	....111.	....1...	1111....
121	Hermione	7.31	0.0482	0.002	208.99	4.7	0.10	6	16	1.00	.1.1...1	....111.	....	...1....
122	Gerda	7.87	0.1883	0.009	81.69	1.9	0.10	3	9	1.00	.1.1...1	....111.	....	....
123	Brunhild	8.89	0.2134	0.026	47.97	2.6	0.69	5	14	1.00	.1.1...1	....111.	1	....
124	Alkeste	8.11	0.1728	0.008	76.36	1.7	0.10	4	12	1.00	.1.1...1	....111.	....	....
125	Liberatrix	9.04	0.2253	0.026	43.58	2.3	0.45	4	11	1.00	.1.1...1	....111.	....1..1	....
126	Velleda	9.27	0.1723	0.010	44.82	1.3	0.10	2	6	1.00	.1.1...1	....111.	....	....
128	Nemesis	7.49	0.0504	0.002	188.16	4.0	0.10	4	12	1.00	.1.1...1	....111.	....	....
130	Elektra	7.11	0.0762	0.011	182.27	11.8	1.00	7	20	1.00	.1.1...1	....111.	....	....
131	Vala	10.03	0.1051	0.010	40.44	1.8	0.71	5	10	1.00	.111...1	....111.	....1..1	...1....
132	Aethra	9.38	0.1718	0.013	42.66	1.6	0.10	5	13	0.83	.111...1	....111.	....1..1	1111....
133	Cyrene	7.98	0.2563	0.053	66.57	6.0	0.93	5	15	1.00	.111...1	....111.	....1..1	....
134	Sophrosyne	8.76	0.0364	0.001	123.27	2.0	0.10	7	20	1.00	.111...1	....111.	....1...	...1....
135	Hertha	8.23	0.1436	0.007	79.24	2.0	0.10	5	15	1.00	.1.1...1	....111.	....	....
136	Austria	9.69	0.1459	0.007	40.14	1.0	0.10	3	9	1.00	.1.1...1	....111.	1	....
137	Meliboea	8.05	0.0503	0.002	145.42	3.3	0.10	4	11	1.00	.1.1...1	....111.	....	....
138	Tolosa	8.75	0.2699	0.027	45.50	2.1	0.10	2	6	1.00	.1.1...1	....111.	1	....
139	Juewa	7.78	0.0557	0.002	156.60	2.8	0.10	7	20	0.88	.1.1...1	....111.	....	....
140	Siwa	8.34	0.0676	0.004	109.79	3.0	0.10	2	6	1.00	.1.....1	....111.	....1...	....
141	Lumen	8.20	0.0540	0.002	131.03	2.9	0.10	3	8	1.00	.1.....1	....111.	....	...1....
142	Polana	10.27	0.0451	0.003	55.29	1.6	0.10	2	6	1.00	.1.1...1	....111.	....	....
143	Adria	9.12	0.0491	0.002	89.93	1.9	0.10	8	23	1.00	.1.1...1	....111.	....	...1....
144	Vibilia	7.91	0.0603	0.003	141.76	2.9	0.10	4	10	1.00	.111...1	....111.	....	...1....
145	Adeona	8.13	0.0433	0.002	151.14	3.2	0.10	4	10	1.00	.111...1	....111.	....	....
146	Lucina	8.20	0.0531	0.002	132.20	2.4	0.10	9	26	1.00	.111...1	....111.	....	...1....
147	Protogeneia	8.27	0.0492	0.004	132.93	5.1	0.37	4	11	1.00	.1.1...1	....111.	....	...1....
148	Gallia	7.64	0.1626	0.013	97.73	3.7	0.37	5	14	1.00	.1.1...1	....111.	....	....
149	Medusa	10.79	0.2199	0.021	19.70	0.9	0.20	7	18	0.88	.111...1	....111.	.1.....1	....
150	Nuwa	8.23	0.0395	0.002	151.14	4.5	0.87	7	19	1.00	.1.1...1	....111.	....	....
151	Abundantia	9.24	0.1728	0.007	45.37	0.9	0.10	6	17	1.00	.1.1.1.1	....111.	1	....
153	Hilda	7.48	0.0618	0.002	170.63	3.3	0.10	7	19	1.00	.111...1	....111.	....	....
154	Bertha	7.58	0.0480	0.002	184.93	3.6	0.10	5	13	1.00	.1.1...1	....111.	....	....
156	Xanthippe	8.64	0.0422	0.002	120.99	2.5	0.10	7	20	1.00	.111...1	....111.	....	....
158	Koronis	9.27	0.2766	0.024	35.37	1.4	0.10	4	11	1.00	.111...1	....111.	1	....
159	Aemilia	8.12	0.0639	0.003	124.96	2.4	0.10	6	17	1.00	.1.1...1	....111.	....	....
160	Una	9.08	0.0625	0.003	81.24	2.1	0.10	2	5	1.00	.1.1...1	....111.	....	....
161	Athor	9.15	0.1980	0.033	44.19	3.3	1.00	9	25	1.00	.1.1...1	....111.	....	....
162	Laurentia	8.83	0.0529	0.003	99.10	2.6	0.10	4	12	1.00	.111...1	....111.	....	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
163	Erigone	9.47	0.0546	0.010	72.63	5.7	0.98	5	15	0.83	.1.1...1	....111.	....	....
164	Eva	8.80	0.0485	0.002	104.92	1.9	0.10	7	20	0.88	.111...1	....111.	....1..1	1111....
165	Loreley	7.44	0.0775	0.005	155.17	4.8	0.10	2	6	1.00	.1.1...1	....111.	....	....
167	Urda	9.24	0.2230	0.023	39.94	1.9	0.31	2	5	1.00	.1.1...1	....111.	1	....
168	Sibylla	7.94	0.0535	0.003	148.39	4.0	0.10	2	6	1.00	.1.1...1	....111.	....	....
169	Zelia	9.56	0.2347	0.041	33.60	2.6	0.80	3	8	0.75	.1.1...1	....111.	.1.....1	....
170	Maria	9.39	0.1579	0.007	44.30	1.0	0.10	4	12	1.00	.111...1	....111.	....	....
171	Ophelia	8.31	0.0615	0.004	116.69	3.6	0.97	4	10	1.00	.1.1...1	....111.	....	....
172	Baucis	8.79	0.1382	0.006	62.43	1.2	0.10	7	21	1.00	.1.1...1	....111.	....	....
173	Ino	7.66	0.0642	0.003	154.10	3.5	0.10	5	14	1.00	.1.1...1	....111.	....	....
174	Phaedra	8.48	0.1495	0.021	69.23	4.4	1.00	7	19	1.00	.1.1...1	....111.	....	....
175	Andromache	8.31	0.0823	0.005	100.92	2.9	0.10	4	12	1.00	.1.1...1	....111.	1	....
176	Iduna	7.90	0.0834	0.003	121.04	2.2	0.10	12	36	1.00	.1.1...1	....111.	....	....
177	Irma	9.49	0.0527	0.002	73.22	1.6	0.10	4	12	1.00	.111...1	....111.	....	....
178	Belisana	9.38	0.2438	0.013	35.81	0.9	0.10	6	16	1.00	.1.1...1	....111.	1	....
179	Klytaemnestra	8.15	0.1609	0.006	77.69	1.4	0.10	12	33	0.92	.111...1	....111.	1	..11....
181	Eucharis	7.84	0.1150	0.006	106.00	2.9	0.10	2	6	1.00	.1.1...1	....111.	....	....
182	Elsa	9.12	0.2083	0.045	43.68	4.1	0.99	5	14	1.00	.1.1...1	....111.	....	....
183	Istria	9.68	0.1890	0.034	35.43	2.8	0.41	5	7	0.71	.111...1	....11..	.11.1..1	1.......
184	Dejopeja	8.31	0.1897	0.012	66.47	2.0	0.10	4	12	1.00	.111...1	....111.	1	....
185	Eunike	7.62	0.0638	0.002	157.51	2.6	0.10	8	23	0.89	.1.1...1	....111.	....	....
186	Celuta	8.91	0.1929	0.013	49.99	1.6	0.10	3	8	1.00	.1.1...1	....111.	1	....
187	Lamberta	8.16	0.0559	0.002	131.25	2.6	0.10	5	14	1.00	.111...1	....111.	....	....
188	Menippe	9.22	0.2431	0.013	38.61	1.0	0.10	7	20	1.00	.1.1...1	....111.	1	....
189	Phthia	9.33	0.2310	0.027	37.66	2.0	0.46	5	14	1.00	.111...1	....111.	1	...1....
191	Kolga	9.07	0.0408	0.003	101.03	3.5	0.10	2	6	1.00	.1.1...1	....111.	1	....
192	Nausikaa	7.13	0.2330	0.009	103.26	1.9	0.13	6	17	1.00	.1.1...1	....111.	....	....
194	Prokne	7.68	0.0528	0.003	168.42	4.1	0.10	3	9	1.00	.111...1	....111.	....	....
195	Eurykleia	9.01	0.0599	0.002	85.71	1.7	0.10	9	26	0.90	.1.1...1	....111.	....	....
196	Philomela	6.55	0.2280	0.023	136.34	6.4	0.62	6	18	1.00	.1.1...1	....111.	....	....
197	Arete	9.18	0.4417	0.083	29.18	2.4	1.00	7	16	0.88	.111...1	....111.	.1.....1	....
198	Ampella	8.33	0.2517	0.027	57.16	2.8	0.85	8	22	0.80	.111...1	....111.	....	...1....
200	Dynamene	8.26	0.0533	0.002	128.36	2.1	0.10	9	24	1.00	.1.1...1	....111.	....	....
201	Penelope	8.43	0.1604	0.018	68.39	3.5	0.75	5	14	1.00	.1.1...1	....111.	....	....
202	Chryseis	7.42	0.2562	0.015	86.15	2.4	0.11	2	5	1.00	.1.....1	....111.	....	....
203	Pompeja	8.76	0.0410	0.002	116.26	2.5	0.10	5	13	1.00	.1.1...1	....111.	....	....
204	Kallisto	8.89	0.2082	0.010	48.57	1.2	0.38	9	24	1.00	11.1...1	....111.	....	....
205	Martha	9.23	0.0548	0.002	80.94	1.4	0.10	6	16	1.00	.1.1...1	....111.	....	....
207	Hedda	9.92	0.0552	0.003	58.70	1.3	0.10	3	9	1.00	.1.1...1	....111.	....1...	....
208	Lacrimosa	8.96	0.2696	0.023	41.33	1.7	0.25	2	5	1.00	.1.1...1	....111.	1	....
209	Dido	8.24	0.0349	0.001	159.94	3.1	0.12	7	20	1.00	.111...1	....111.	....	....
210	Isabella	9.33	0.0436	0.002	86.65	2.3	0.10	2	6	1.00	.111...1	....111.	....	....
211	Isolda	7.89	0.0602	0.004	143.19	5.1	0.49	20	58	0.95	.1.1...1	....111.	....	..11....
212	Medea	8.28	0.0465	0.002	136.12	2.5	0.10	6	16	1.00	.1.1...1	....111.	....	....
213	Lilaea	8.64	0.0897	0.006	83.01	2.6	0.10	2	5	1.00	.1.1...1	....111.	....1...	....
214	Aschera	9.50	0.5220	0.048	23.16	1.0	0.10	5	8	1.00	.1.1...1	.....11.	.1.....1	....
215	Oenone	9.59	0.2044	0.011	35.51	0.9	0.10	7	19	1.00	.1.1...1	....111.	1	....
216	Kleopatra	7.30	0.1164	0.004	135.07	2.1	0.10	8	19	1.00	.111...1	....111.	....	....
217	Eudora	9.80	0.0484	0.004	66.24	2.3	0.10	2	6	1.00	..11..11	....111.	....1...	...1....
218	Bianca	8.60	0.1746	0.008	60.62	1.4	0.10	4	12	1.00	.1.1...1	....111.	....	....

IMPS Albedos and Diameters

ID/1 Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
219 Thusnelda	9.32	0.2009	0.030	40.56	2.7	0.56	6	17	1.00	.1.1...1	....111.	1	....
220 Stephania	11.00	0.0726	0.007	31.12	1.5	0.19	2	5	1.00	.1.1...1	....111.	1	....
221 Eos	7.67	0.1400	0.010	103.87	3.6	0.98	7	15	1.00	.111...1	....111.	....1..1	1111....
222 Lucia	9.13	0.1308	0.021	54.87	3.9	0.81	14	40	1.00	.111...1	....111.	....1..1	1..1....
223 Rosa	9.68	0.0309	0.003	87.61	4.4	0.60	6	17	1.00	.1.1...1	....111.	....	....
224 Oceana	8.59	0.1694	0.012	61.82	2.1	0.10	2	6	1.00	..11..11	....111.	....	....
225 Henrietta	8.72	0.0396	0.002	120.49	2.5	0.10	6	17	1.00	.1.1...1	....111.	....	....
226 Weringia	9.75	0.1948	0.019	33.79	1.5	0.10	3	7	0.75	.1.1...1	....111.	.1.....1	....
227 Philosophia	8.70	0.0768	0.004	87.31	2.4	0.18	4	12	0.80	.1.1...1	....111.	....	....
228 Agathe	12.48	0.2082	0.043	9.30	0.8	0.10	1	2	0.11	.1.....1	...111..	.1.....1	....
229 Adelinda	9.13	0.0453	0.004	93.20	4.3	0.10	1	3	1.00	.1.....1	....111.	....	....
230 Athamantis	7.35	0.1708	0.006	108.99	2.0	0.10	6	18	1.00	.1.1...1	....111.	....1...	...1....
231 Vindobona	9.20	0.0545	0.003	82.33	2.1	0.10	3	9	1.00	.1.1...1	....111.	....1...	...1....
232 Russia	10.25	0.0494	0.002	53.28	1.1	0.12	7	19	1.00	.1.1...1	....111.	1	...1....
233 Asterope	8.21	0.0870	0.015	102.78	7.9	1.00	14	41	1.00	.1.1...1	....111.	..1.....	....
234 Barbara	9.02	0.2276	0.011	43.75	1.0	0.10	4	11	1.00	.1.1...1	....111.	....	....
235 Carolina	8.82	0.1580	0.009	57.58	1.5	0.10	4	11	1.00	.111...1	....111.	1	....
236 Honoria	8.18	0.1271	0.012	86.20	3.7	0.49	7	21	1.00	.1.1...1	....111.	....	....
237 Coelestina	9.24	0.2108	0.016	41.08	1.4	0.10	3	7	1.00	.111...1	....111.	1	....
238 Hypatia	8.18	0.0428	0.002	148.49	3.6	0.24	6	17	0.86	.1.1...1	....111.	....	....
239 Adrastea	10.30	0.0777	0.006	41.52	1.4	0.18	5	15	1.00	.1.1...1	....111.	1	....
240 Vanadis	9.00	0.0411	0.002	103.90	2.5	0.10	3	9	1.00	.1.1...1	....111.	....	...1....
241 Germania	7.58	0.0575	0.002	168.90	3.1	0.10	6	17	1.00	.111...1	....111.	....	....
242 Kriemhild	9.70	0.1588	0.019	38.30	2.1	0.11	2	6	1.00	.1.1...1	....111.	1	....
243 Ida	9.94	0.2382	0.065	28.00	3.2	0.90	6	13	0.86	.111...1	....111.	.11....1	....
244 Sita	12.20	0.1941	0.033	10.95	0.8	0.10	3	4	0.27	.111...1	...111..	.1.....1	....
245 Vera	7.82	0.2082	0.018	79.50	3.2	0.83	2	5	1.00	.1.1...1	....111.	1	....
246 Asporina	8.62	0.1744	0.027	60.10	4.2	1.00	7	19	1.00	.1.1...1	....111.	1	....
247 Eukrate	8.04	0.0595	0.002	134.43	2.5	0.10	6	17	1.00	.1.1...1	....111.	....	....
248 Lameia	10.21	0.0615	0.007	48.66	2.5	0.94	4	11	1.00	.1.1...1	....111.	....	....
249 Ilse	11.33	0.0428	0.003	34.83	1.1	0.10	5	15	1.00	.1.1...1	....111.	1	....
250 Bettina	7.58	0.2581	0.033	79.75	4.6	0.36	4	12	1.00	.1.1...1	....111.	1	....
251 Sophia	10.00	0.2188	0.091	28.42	4.5	0.74	2	3	0.50	.11....1	.....11.	.11....1	....
252 Clementina	9.10	0.0843	0.012	69.29	4.4	0.67	5	14	1.00	.1.1...1	....111.	1	....
253 Mathilde	10.20	0.0436	0.004	58.05	2.6	0.25	7	20	1.00	.1.1...1	....111.	....	....
254 Augusta	12.13	0.1695	0.036	12.11	1.1	0.10	1	2	0.20	.1.1...1	...111..	.1.....1	....
255 Oppavia	10.39	0.0374	0.002	57.40	1.5	0.10	4	12	1.00	.111...1	....111.	....	....
256 Walpurga	9.80	0.0529	0.005	63.34	2.7	0.69	3	8	1.00	.1.....1	....111.	1	....
257 Silesia	9.47	0.0545	0.003	72.66	2.2	0.10	2	5	1.00	.1.1...1	....111.	....	....
258 Tyche	8.50	0.1676	0.006	64.78	1.2	0.10	8	23	1.00	.111...1	....111.	1	....
259 Aletheia	7.76	0.0436	0.004	178.60	6.8	0.28	2	6	1.00	.1.1...1	....111.	....1...	..11....
260 Huberta	8.97	0.0509	0.004	94.67	3.6	0.10	1	3	1.00	.1.....1	....111.	....	....
261 Prymno	9.44	0.1141	0.006	50.93	1.3	0.10	3	9	1.00	.1.1...1	....111.	....	....
263 Dresda	10.40	0.2263	0.043	23.24	1.9	0.18	3	4	0.75	.111...1	.....11.	.1.....1	....
264 Libussa	8.42	0.2971	0.034	50.48	2.7	0.39	7	19	1.00	.111...1	....111.	1	..11....
265 Anna	11.20	0.1045	0.033	23.66	3.0	0.56	2	3	1.00	.111...1	.....11.	.1..1..1	....
266 Aline	8.80	0.0448	0.003	109.09	2.9	0.10	2	6	0.67	.1.1...1	....111.	....	....
267 Tirza	10.50	0.0402	0.005	52.68	3.1	0.66	4	11	1.00	.1.1...1	....111.	1	....
268 Adorea	8.28	0.0440	0.003	139.89	5.2	0.10	1	3	1.00	.1.1...1	....111.	....	....
269 Justitia	9.50	0.0974	0.005	53.62	1.3	0.10	4	12	1.00	.1.1...1	....111.	....	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
270	Anahita	8.75	0.2166	0.018	50.78	2.0	0.35	6	17	1.00	.1.1...1	....111.	....1...	...1....
271	Penthesilea	9.80	0.0633	0.008	57.93	3.3	0.71	5	13	1.00	.1.1...1	....111.	1	....
272	Antonia	10.70	0.1443	0.017	25.35	1.4	0.16	4	9	1.00	.1.1...1	....111.	.1.....1	....
273	Atropos	10.26	0.1624	0.015	29.27	1.3	0.10	3	7	1.00	.1.1...1	....111.	.1.....1	....
274	Philagoria	10.10	0.2282	0.047	26.57	2.4	0.64	5	10	1.00	.1.1...1	....111.	.1.....1	....
276	Adelheid	8.56	0.0450	0.006	121.60	7.7	0.97	8	24	1.00	.1.1...1	....111.	....	....
277	Elvira	9.84	0.2770	0.020	27.19	0.9	0.10	6	17	1.00	.111...1	....111.	.1.....1	....
278	Paulina	9.40	0.2505	0.024	35.01	1.6	0.24	4	12	1.00	.1.1...1	....111.	1	....
279	Thule	8.57	0.0412	0.003	126.59	3.7	0.13	4	9	0.67	.111...1	....111.	....1..1	...1....
280	Philia	11.19	0.0285	0.003	45.55	2.0	0.10	6	17	1.00	.111...1	....111.	..1....1	....
281	Lucretia	12.02	0.1987	0.035	11.76	0.9	0.39	4	6	0.44	.111...1	....11..	.1..1..1	....
282	Clorinde	10.91	0.0502	0.003	39.03	1.0	0.10	8	22	1.00	.111...1	....111.	....1..1	1.......
283	Emma	8.72	0.0262	0.002	148.06	4.6	0.10	2	4	1.00	.1.1...1	....111.	....	....
284	Amalia	10.05	0.0598	0.006	53.11	2.5	1.00	8	23	0.89	.1.1...1	....111.	....	....
285	Regina	10.50	0.0547	0.006	45.13	2.2	0.10	2	4	1.00	.1.1...1	....111.	.1.....1	....
286	Iclea	8.98	0.0481	0.002	96.90	2.2	0.10	4	10	1.00	.1.1...1	....111.	....1...	...1....
287	Nephthys	8.30	0.1851	0.008	67.60	1.4	0.10	4	12	1.00	.1.1...1	....111.	....	....
288	Glauke	9.84	0.1973	0.029	32.21	2.2	0.10	1	2	0.50	.1.1...1	.....11.	1	....
289	Nenetta	9.51	0.2438	0.042	33.73	2.6	0.10	2	2	0.50	.1.1...1	.....1..	.1.....1	....
291	Alice	11.45	0.2075	0.033	14.97	1.1	0.10	3	3	0.23	.111...1	...1.1..	.1.....1	...1....
292	Ludovica	10.24	0.1397	0.007	31.85	0.8	0.10	9	24	1.00	.111...1	....111.	....11.1	1111....
293	Brasilia	9.94	0.0615	0.004	55.11	1.6	0.10	11	31	1.00	.111...1	....111.	1	....
294	Felicia	9.60	0.0910	0.008	52.97	2.2	0.10	3	6	0.75	.1.1...1	.....11.	1	....
295	Theresia	10.19	0.1930	0.029	27.72	1.9	0.10	2	3	0.40	.111...1	....11..	.1.....1	...1....
297	Caecilia	9.50	0.1796	0.018	39.48	1.8	0.10	3	6	0.75	.111...1	.....11.	.1.....1	....
299	Thora	11.40	0.1673	0.033	17.06	1.5	0.12	3	3	0.43	.111...1	.....1..	.1.....1	....
300	Geraldina	9.60	0.0397	0.002	80.18	2.3	0.10	2	5	1.00	.1.1...1	....111.	....1...	...1....
301	Bavaria	10.10	0.0546	0.007	54.32	3.3	1.00	9	25	0.82	.111...1	....111.	1	...1....
302	Clarissa	10.89	0.0524	0.010	38.53	3.1	0.82	7	21	1.00	.111...1	....111.	1	....
303	Josephina	8.70	0.0594	0.002	99.29	1.9	0.10	5	15	1.00	.1.1...1	....111.	....1...	...1....
304	Olga	9.74	0.0488	0.003	67.86	2.1	0.10	2	6	1.00	.111...1	....111.	....	....
305	Gordonia	8.77	0.2269	0.014	49.17	1.5	0.23	8	22	1.00	.1.1...1	....111.	....1...	..11....
306	Unitas	8.96	0.2112	0.023	46.70	2.3	0.83	11	32	1.00	.1.1...1	....111.	....	...1....
307	Nike	10.12	0.0524	0.007	54.96	3.3	0.98	6	17	1.00	.1.1...1	....111.	1	....
308	Polyxo	8.17	0.0482	0.003	140.69	3.8	0.10	2	6	1.00	.1.1...1	....111.	....1..1	...1....
309	Fraternitas	10.40	0.0595	0.010	45.32	3.3	1.00	4	7	1.00	.111...1	....11..	....11.1	1111....
310	Margarita	10.30	0.1250	0.014	32.75	1.7	0.14	4	6	0.50	..11...1	....11..	....11.1	1111....
311	Claudia	9.89	0.3381	0.057	24.05	1.8	0.10	2	2	1.00	.1.1...1	.....1..	.1..1..1	....
312	Pierretta	8.89	0.1967	0.013	49.96	1.5	0.24	10	27	1.00	.111...1	....111.	....1..1	1111....
313	Chaldaea	8.91	0.0520	0.002	96.34	1.7	0.10	6	17	1.00	.1.1...1	....111.	....	....
314	Rosalia	9.50	0.0867	0.007	56.82	2.0	0.10	3	9	1.00	.111...1	....111.	1	....
316	Goberta	9.80	0.0925	0.008	47.92	1.9	0.10	2	6	1.00	.1.1...1	....111.	1	....
317	Roxane	10.03	0.4928	0.083	18.67	1.4	0.10	2	2	0.40	.111...1	.....1..	.1.....1	....
319	Leona	9.80	0.0457	0.014	68.16	8.5	1.00	8	20	0.89	.111...1	....111.	..1....1	...1....
321	Florentina	10.04	0.2296	0.028	27.23	1.5	0.10	4	7	0.44	.111...1	....111.	.1.....1	....
322	Phaeo	9.01	0.0876	0.013	70.84	4.9	0.91	10	24	0.83	11.1...1	....111.	..1.1..1	1111....
323	Brucia	9.73	0.1765	0.018	35.82	1.7	0.10	1	2	1.00	.1.1...1	....1.1.	....	....
324	Bamberga	6.82	0.0628	0.004	229.43	7.4	0.10	2	5	1.00	.1.1...1	....111.	....	....
325	Heidelberga	8.65	0.1068	0.005	75.72	1.7	0.10	6	18	1.00	.1.1...1	....111.	....	....
326	Tamara	9.36	0.0368	0.001	93.00	1.7	0.99	4	11	1.00	.111...1	....111.	....	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
328 Gudrun	8.60	0.0425	0.004	122.92	5.2	0.56	3	7	1.00	.111...1	....111.	....1...	....
329 Svea	9.66	0.0399	0.001	77.80	1.4	0.10	5	14	1.00	.111...1	....111.	....	....
331 Etheridgea	9.62	0.0447	0.003	74.92	2.7	0.78	4	11	1.00	.1.1...1	....111.	....	....
332 Siri	9.50	0.1719	0.017	40.37	1.8	0.10	2	6	1.00	.1.1...1	....111.	1	....
333 Badenia	9.46	0.0475	0.002	78.17	1.9	0.32	4	11	1.00	.1.1...1	....111.	1	....
334 Chicago	7.64	0.0640	0.011	155.82	12.0	0.78	5	12	1.00	.111...1	....111.	....11.1	1111....
335 Roberta	8.96	0.0580	0.003	89.07	2.0	0.10	6	17	1.00	.1.1...1	....111.	....	....
336 Lacadiera	9.75	0.0463	0.003	69.30	2.4	0.32	8	23	0.73	.1.1...1	....111.	....	....
337 Devosa	8.74	0.1614	0.013	59.11	2.3	0.10	3	6	0.75	.111...1	....111.	....1..1	1111....
338 Budrosa	8.50	0.1766	0.062	63.11	8.8	1.00	5	15	1.00	.111...1	....111.	..1....1	...1....
339 Dorothea	9.24	0.2431	0.021	38.25	1.6	0.10	5	11	0.83	.111...1	....111.	.1..1..1	....
340 Eduarda	9.90	0.2118	0.018	30.24	1.2	0.10	3	8	1.00	.1.1...1	....111.	.1.....1	....
341 California	10.55	0.4950	0.064	14.67	0.9	0.48	8	21	0.50	.111...1	....111.	.1..1..1	....
342 Endymion	10.22	0.0393	0.004	60.63	2.8	0.94	2	5	1.00	.1.1...1	....111.	....	....
343 Ostara	11.56	0.1151	0.017	19.10	1.3	0.33	2	5	1.00	.111...1	....111.	.1..1..1	....
344 Desiderata	8.10	0.0581	0.005	132.25	5.5	0.96	9	25	0.90	.1.1...1	....111.	....	....
345 Tercidina	8.71	0.0654	0.007	94.12	4.9	0.91	5	13	0.83	.1.1...1	....111.	....	...1....
346 Hermentaria	7.13	0.2189	0.009	106.52	2.2	0.10	4	12	1.00	.1.1...1	....111.	....	....
347 Pariana	8.96	0.1751	0.035	51.28	4.4	1.00	10	28	1.00	.1.1...1	....111.	..1.1..1	..11....
348 May	9.40	0.0448	0.002	82.82	2.2	0.18	6	18	0.86	.111...1	....111.	....	....
349 Dembowska	5.93	0.3840	0.025	139.77	4.3	0.72	6	17	1.00	.1.1...1	....111.	....	...1....
350 Ornamenta	8.37	0.0566	0.005	118.35	4.5	0.99	12	35	0.92	.111...1	....111.	....	...1....
351 Yrsa	8.98	0.2884	0.034	39.59	2.2	0.19	4	10	1.00	.1.1...1	....111.	.11....1	....
352 Gisela	10.01	0.4261	0.153	20.27	2.9	0.99	2	6	1.00	.1.1...1	....111.	.11....1	...1....
354 Eleonora	6.44	0.1948	0.023	155.17	8.5	1.00	15	42	1.00	.111...1	....111.	....	....
355 Gabriella	10.40	0.2266	0.022	23.22	1.0	0.10	7	11	0.58	.111...1	....111.	.1.....1	...1....
356 Liguria	8.22	0.0528	0.002	131.31	2.6	0.10	7	19	1.00	.1.1...1	....111.	....	....
357 Ninina	8.72	0.0510	0.002	106.10	2.2	0.10	5	14	1.00	.1.1...1	....111.	....	....
358 Apollonia	9.10	0.0506	0.003	89.45	2.7	0.52	7	19	1.00	.1.1...1	....111.	....	....
359 Georgia	8.86	0.2621	0.059	43.89	4.2	0.78	4	12	1.00	.1.1...1	....111.	..1....1	....
360 Carlova	8.48	0.0535	0.004	115.76	4.3	0.26	6	15	1.00	.1.1...1	....111.	....1..1	1111....
361 Bononia	8.22	0.0453	0.005	141.72	6.9	0.98	8	23	0.89	.111...1	....111.	....	....
364 Isara	9.86	0.2566	0.020	27.99	1.0	0.10	6	15	0.75	.111...1	....111.	1	...1....
365 Corduba	9.18	0.0335	0.002	105.92	3.0	0.52	12	35	1.00	.1.1...1	....111.	....	...1....
366 Vincentina	8.50	0.0800	0.006	93.75	3.2	0.21	10	27	0.91	.111...1	....111.	....1..1	1..1....
367 Amicitia	10.70	0.2535	0.050	19.13	1.6	0.10	1	2	1.00	.1.1...1	.....11.	.1.....1	....
368 Haidea	9.93	0.0389	0.003	69.61	2.2	0.10	4	11	1.00	.111...1	....111.	1	....
369 Aeria	8.52	0.1919	0.008	60.00	1.2	0.10	9	27	1.00	.1.1...1	....111.	1	....
371 Bohemia	8.72	0.1924	0.008	54.64	1.1	0.11	7	19	1.00	.1.1...1	....111.	....	....
372 Palma	7.20	0.0655	0.002	188.62	3.2	0.10	6	18	1.00	.1.1...1	....111.	....	....
373 Melusina	9.13	0.0429	0.004	95.77	3.7	0.37	6	18	1.00	.1.1...1	....111.	....1..1	....
374 Burgundia	8.67	0.3014	0.018	44.67	1.3	0.10	4	11	1.00	.111...1	....111.	1	...1....
376 Geometria	9.49	0.2320	0.030	34.91	2.1	0.74	4	12	1.00	.111...1	....111.	....	....
377 Campania	8.89	0.0592	0.003	91.05	2.0	0.10	4	10	1.00	.111...1	....111.	....	....
378 Holmia	9.80	0.2971	0.043	26.74	1.7	0.10	3	6	0.75	.1.1...1	.....11.	.11....1	....
379 Huenna	8.87	0.0587	0.002	92.33	1.7	0.10	6	18	1.00	.1.1...1	....111.	....	....
380 Fiducia	9.42	0.0563	0.005	73.19	2.8	0.78	10	29	1.00	.1.1...1	....111.	....	....
381 Myrrha	8.25	0.0609	0.003	120.58	2.7	0.10	8	24	1.00	.1.1...1	....111.	....	....
382 Dodona	8.77	0.1610	0.017	58.37	2.8	0.68	6	17	1.00	.1.1...1	....111.	1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											1111111	11122222	22222333
										12345678	90123456	78901234	56789012
383 Janina	9.91	0.0926	0.008	45.52	1.8	0.10	4	10	1.00	.1.1...1	....111.	1	....
384 Burdigala	9.64	0.1805	0.025	36.93	2.4	0.91	6	17	1.00	.1.1...1	....111.	1	...1....
385 Ilmatar	7.49	0.2129	0.008	91.53	1.6	0.10	8	24	1.00	.111...1	....111.	....	....
386 Siegena	7.43	0.0692	0.002	165.01	2.7	0.10	7	19	1.00	.1.1...1	....111.	....	....
387 Aquitania	7.41	0.1900	0.011	100.51	2.9	0.10	2	6	1.00	.111...1	....111.	....	....
388 Charybdis	8.57	0.0506	0.007	114.17	6.8	0.81	5	15	1.00	.1.1...1	....111.	....	....
389 Industria	7.88	0.1996	0.012	78.98	2.3	0.35	10	30	1.00	.1.1...1	....111.	....	....
390 Alma	10.39	0.2190	0.029	23.74	1.4	0.25	6	15	1.00	.1.1...1	....111.	.11....1	....
392 Wilhelmina	9.70	0.0589	0.003	62.88	1.5	0.10	3	8	1.00	.1.1...1	....111.	....	....
393 Lampetia	8.39	0.0829	0.099	96.89	31.4	1.00	3	7	1.00	.1.1..11	....111.	.11....1	....
394 Arduina	9.66	0.2464	0.032	31.32	1.8	0.10	3	4	0.75	.1.1...1	....11..	.1.....1	....
395 Delia	10.38	0.0479	0.005	50.98	2.4	0.10	1	3	1.00	.1.....1	....111.	1	....
396 Aeolia	9.90	0.1667	0.036	34.09	3.2	0.99	7	20	1.00	.111...1	....111.	1	....
397 Vienna	9.31	0.1776	0.015	43.34	.8	0.10	2	5	1.00	.1.1...1	....111.	....1..1	...1....
398 Admete	10.30	0.0607	0.006	46.98	2.3	0.10	3	8	0.75	.111...1	....111.	....1..1	...1....
399 Persephone	9.00	0.1838	0.034	49.13	4.0	0.83	5	14	1.00	.1.1...1	....111.	1	....
400 Ducrosa	10.10	0.1423	0.014	33.66	1.6	0.10	5	10	1.00	.111...1	....111.	.1.....1	....
401 Ottilia	9.10	0.0412	0.002	99.12	2.1	0.10	4	11	1.00	.1.1...1	....111.	....	....
402 Chloe	9.02	0.1483	0.015	54.21	2.5	0.93	5	14	1.00	.1.1...1	....111.	1	....
403 Cyane	9.10	0.1684	0.007	49.03	1.0	0.10	8	22	1.00	.1.1...1	....111.	....	...1....
404 Arsinoe	9.01	0.0461	0.001	97.71	1.5	0.10	9	26	1.00	.1.1...1	....111.	....	....
405 Thia	8.46	0.0468	0.002	124.90	2.3	0.10	5	15	1.00	.1.1.1.1	....111.	....	....
406 Erna	10.36	0.0524	0.004	49.19	1.7	0.10	4	12	1.00	.1.1...1	....111.	1	....
407 Arachne	8.88	0.0548	0.007	95.07	5.4	0.93	9	27	0.90	.1.1...1	....111.	....	..11....
408 Fama	9.50	0.1681	0.019	40.81	2.1	0.12	5	7	0.45	.111...1	....111.	.1.....1	...1....
409 Aspasia	7.62	0.0606	0.005	161.60	6.8	0.51	4	12	1.00	.111...1	....111.	....	...1....
410 Chloris	8.30	0.0554	0.005	123.51	5.5	0.94	19	54	1.00	.1.1...1	....111.	....1...	1111....
411 Xanthe	8.90	0.0831	0.005	76.53	2.3	0.28	7	21	1.00	.1.1...1	....111.	....	....
412 Elisabetha	9.00	0.0536	0.003	90.96	2.2	0.10	5	14	1.00	.1.1...1	....111.	....	...1....
413 Edburga	10.18	0.1466	0.029	31.95	2.8	0.85	4	12	1.00	.1.1...1	....111.	....1..1	...1....
414 Liriope	9.49	0.0579	0.005	69.89	2.9	0.10	6	16	1.00	.1.1...1	....111.	..1....1	....
415 Palatia	9.21	0.0628	0.008	76.34	4.6	1.00	11	31	1.00	.1.1...1	....111.	....	....
416 Vaticana	7.89	0.1689	0.007	85.47	1.7	0.10	5	15	0.71	.1.1...1	....111.	....1...	....
417 Suevia	9.34	0.1960	0.020	40.69	1.9	0.30	2	6	1.00	.1.1...1	....111.	....1..1	....
418 Alemannia	9.77	0.1878	0.062	34.10	4.6	1.00	8	17	1.00	.111...1	....111.	.11.1..1	...1....
419 Aurelia	8.42	0.0455	0.003	129.01	4.1	0.55	12	34	1.00	.111...1	....111.	....	....
420 Bertholda	8.31	0.0420	0.004	141.25	6.9	0.88	11	32	1.00	.1.1...1	....111.	....	...1....
423 Diotima	7.24	0.0515	0.003	208.77	4.9	0.10	3	9	1.00	.1.1...1	....111.	....	....
424 Gratia	9.80	0.0279	0.001	87.20	1.8	0.10	6	16	1.00	.111...1	....111.	....	...1....
425 Cornelia	9.90	0.0475	0.003	63.85	1.7	0.10	3	9	1.00	.1.1...1	....111.	....	....
426 Hippo	8.42	0.0469	0.003	127.10	3.5	0.57	6	14	1.00	.111...1	....111.	....	....
427 Galene	9.80	0.2364	0.020	29.98	1.2	0.10	5	10	0.63	.111...1	....111.	.1.....1	....
428 Monachia	11.50	0.1406	0.022	17.77	1.3	0.10	3	3	0.75	.1.1...1	.....1..	.1.....1	....
429 Lotis	9.82	0.0430	0.002	69.62	1.5	0.10	6	17	1.00	.1.1...1	....111.	....	....
430 Hybris	10.30	0.1206	0.007	33.33	0.9	0.10	5	14	1.00	.1.1...1	....111.	1	....
431 Nephele	8.72	0.0636	0.002	95.03	1.6	0.10	8	20	1.00	.111...1	....111.	....	....
432 Pythia	8.84	0.2338	0.009	46.90	0.8	0.10	9	27	1.00	.1.1...1	....111.	....	....
435 Ella	10.23	0.0831	0.006	41.49	1.5	0.10	2	6	1.00	.1.1...1	....111.	....	....
436 Patricia	9.80	0.0599	0.009	59.53	4.2	0.80	9	26	1.00	.1.1...1	....111.	1	....
437 Rhodia	10.41	0.7035	0.084	13.12	0.7	0.10	2	3	0.67	.1.1...1	.....11.	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
438	Zeuxo	9.80	0.0566	0.008	61.24	4.0	0.90	8	24	1.00	.1.1...1	....111.	1	....
439	Ohio	9.83	0.0352	0.002	76.57	2.2	0.10	2	6	1.00	.1.1...1	....111.	....1...	....
441	Bathilde	8.51	0.1410	0.011	70.32	2.6	0.10	1	3	1.00	.1.1...1	....111.	....	....
442	Eichsfeldia	10.03	0.0398	0.003	65.73	2.5	0.49	8	23	1.00	.1.1.1.1	....111.	....	....
443	Photographica	10.26	0.1918	0.025	26.68	1.6	1.00	8	22	1.00	.1.1...1	....111.	1	....
444	Gyptis	7.83	0.0512	0.010	159.57	13.1	1.00	4	11	1.00	.1.1...1	....111.	....1...	...1....
445	Edna	9.29	0.0447	0.002	87.17	2.1	0.10	9	25	1.00	.111...1	....111.	....1..1	1.11....
446	Aeternitas	8.90	0.2361	0.038	45.40	3.2	0.93	6	17	1.00	.111...1	....111.	1	....
447	Valentine	8.99	0.0709	0.006	79.50	3.0	0.47	12	35	0.80	.1.1...1	....111.	....	...1....
448	Natalie	10.30	0.0588	0.004	47.76	1.7	0.10	2	6	1.00	.1.1...1	....111.	1	....
449	Hamburga	9.47	0.0393	0.002	85.59	1.9	0.10	7	21	1.00	.1.1...1	....111.	....	....
450	Brigitta	10.28	0.1229	0.010	33.32	1.3	0.10	4	11	1.00	.1.1...1	....111.	1	...1....
451	Patientia	6.65	0.0764	0.003	224.96	4.4	0.10	6	17	1.00	.1.1...1	....111.	....1...	...1....
453	Tea	10.60	0.2480	0.031	20.35	1.1	0.10	3	7	0.75	.1.1...1	....111.	.1.....1	....
454	Mathesis	9.20	0.0555	0.005	81.57	3.2	0.10	1	3	1.00	.1.1...1	....111.	....	...1....
455	Bruchsalia	8.86	0.0709	0.009	84.41	5.0	0.96	6	17	1.00	.1.1...1	....111.	....	....
456	Abnoba	9.20	0.2335	0.048	39.76	3.6	1.00	7	20	1.00	.111...1	....111.	..1....1	....
458	Hercynia	9.63	0.1654	0.009	38.75	1.0	0.10	3	8	1.00	.1.1...1	....111.	....	....
459	Signe	10.44	0.1370	0.026	29.32	2.4	0.10	1	2	0.25	..1....1	...111..	.1.....1	....
460	Scania	10.60	0.2144	0.042	21.78	1.9	0.10	2	2	1.00	..11...1	.....1..	.1.....1	....
462	Eriphyla	9.23	0.2829	0.023	35.63	1.4	0.10	3	8	0.60	.111...1	....111.	1	....
463	Lola	11.82	0.0829	0.014	19.97	1.5	0.51	7	12	0.88	.111...1	....11..	.11.1..1	....
464	Megaira	9.52	0.0502	0.009	74.04	5.9	1.00	6	18	1.00	.1.1...1	....111.	....1...	...1....
465	Alekto	9.70	0.0433	0.004	73.34	2.8	0.85	6	17	1.00	.1.1...1	....111.	....	....
466	Tisiphone	8.30	0.0634	0.002	115.53	2.2	0.10	11	28	1.00	.1.1...1	....111.	....1..1	1111....
467	Laura	10.50	0.0633	0.011	41.96	3.2	0.75	8	20	0.89	.111...1	....111.	.11....1	....
468	Lina	9.83	0.0430	0.003	69.34	2.5	0.10	2	6	1.00	.1.1...1	....111.	....1...	..11....
469	Argentina	8.62	0.0399	0.004	125.57	5.6	0.90	6	17	1.00	.1.1...1	....111.	....	....
470	Kilia	10.07	0.2379	0.014	26.39	0.7	0.10	10	28	1.00	.111...1	....111.	1	....
471	Papagena	6.73	0.1994	0.016	134.19	5.2	0.99	4	11	1.00	.1.1...1	....111.	....	....
472	Roma	8.92	0.2138	0.034	47.27	3.4	1.00	6	18	0.86	.111...1	....111.	....	...1....
474	Prudentia	10.60	0.0720	0.016	37.59	3.5	1.00	6	16	1.00	.111...1	....111.	..1.....	....
476	Hedwig	8.55	0.0493	0.002	116.76	2.6	0.10	4	10	1.00	.1.1...1	....111.	....	....
477	Italia	10.25	0.2769	0.028	22.51	1.1	0.95	6	15	0.86	.1.1...1	....111.	.1.....1	..11....
478	Tergeste	7.98	0.1798	0.007	79.46	1.5	0.10	7	21	1.00	.1.1...1	....111.	....	...1....
479	Caprera	9.60	0.0480	0.004	72.98	2.9	0.55	5	14	1.00	.111...1	....111.	....1...	..11....
480	Hansa	8.38	0.2485	0.024	56.22	2.5	0.54	6	16	1.00	.111...1	....111.	....1..1	1111....
482	Petrina	8.84	0.2372	0.032	46.57	2.8	0.10	2	6	1.00	.1.1...1	....111.	....1..1	...1....
483	Seppina	8.38	0.1623	0.014	69.58	2.8	0.26	10	29	1.00	.1.1...1	....111.	1	...1....
484	Pittsburghia	9.86	0.2012	0.030	31.61	2.1	0.10	1	2	0.50	..1...11	....11..	1	....
485	Genua	8.30	0.2072	0.020	63.88	2.9	1.00	8	22	1.00	.111...1	....111.	....1...	...1....
486	Cremona	10.70	0.1923	0.022	21.96	1.2	0.10	2	4	1.00	.1.1...1	....111.	.1..1..1	....
487	Venetia	8.14	0.2457	0.011	63.15	1.3	0.10	8	22	1.00	.1.1...1	....111.	....	....
488	Kreusa	7.81	0.0589	0.005	150.12	6.4	1.00	7	20	1.00	.1.1...1	....111.	....	....
489	Comacina	8.32	0.0427	0.002	139.40	3.0	0.10	4	11	1.00	.1.1...1	....111.	....1...	...1....
490	Veritas	8.32	0.0622	0.006	115.55	5.5	0.66	6	18	1.00	.1.1...1	....111.	....	....
491	Carina	8.50	0.0743	0.006	97.29	3.8	0.10	1	3	1.00	.1.1...1	....111.	....1...	...1....
492	Gismonda	9.80	0.0795	0.005	51.69	1.4	0.10	8	24	1.00	.111...1	....111.	1	....
493	Griseldis	10.30	0.0622	0.013	46.41	4.1	0.69	9	20	1.00	.111...1	....111.	.11....1	....
494	Virtus	8.96	0.0630	0.003	85.52	1.8	0.10	6	18	1.00	.1.1...1	....111.	....	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
495	Eulalia	10.78	0.0571	0.004	38.85	1.4	0.15	8	22	1.00	.111...1	....111.	1	....
496	Gryphia	11.61	0.1676	0.027	15.47	1.1	0.10	2	2	0.50	.1.1...1	.....1..	.1.....1	....
498	Tokio	8.95	0.0679	0.007	82.75	4.1	0.78	7	17	1.00	.111...1	....111.	....	...1....
499	Venusia	9.39	0.0468	0.004	81.38	3.3	0.10	4	10	1.00	.111...1	....111.	1	....
500	Selinur	9.30	0.1744	0.008	43.93	1.0	0.10	5	14	1.00	.1.1...1	....111.	1	...1....
501	Urhixidur	8.90	0.0812	0.005	77.44	2.3	0.10	3	8	1.00	.1.1...1	....111.	1	....
502	Sigune	10.77	0.3405	0.105	15.98	2.0	0.83	3	6	1.00	.111...1	....11..	.11.1..1	....
503	Evelyn	9.14	0.0585	0.008	81.68	4.9	0.69	2	6	1.00	.111...1	....111.	....	....
504	Cora	9.40	0.3407	0.058	30.02	2.3	1.00	14	40	0.93	.111...1	....111.	1	....
506	Marion	8.85	0.0454	0.002	105.94	2.6	0.37	6	17	1.00	.111...1	....111.	....	....
507	Laodica	9.10	0.2112	0.045	43.78	4.0	0.65	11	23	0.92	.111...1	....111.	.11.1..1	..11....
508	Princetonia	8.24	0.0441	0.002	142.35	2.6	0.10	8	24	1.00	.1.1...1	....111.	....	....
509	Iolanda	8.40	0.2747	0.043	52.99	3.7	0.57	4	12	1.00	.111...1	....111.	.1.....1	....
510	Mabella	9.73	0.0687	0.007	57.44	2.8	0.92	8	23	1.00	.1.1...1	....111.	....	....
511	Davida	6.22	0.0540	0.002	326.07	5.3	0.10	8	22	1.00	.1.1...1	....111.	....	...1....
512	Taurinensis	10.68	0.1772	0.024	23.09	1.4	0.10	4	5	1.00	.111...1	....11..	.1.....1	....
513	Centesima	9.75	0.0885	0.007	50.15	1.8	0.10	2	6	1.00	.1.....1	....111.	1	....
514	Armida	9.04	0.0379	0.003	106.17	3.8	0.46	5	15	1.00	.1.1...1	....111.	....	....
515	Athalia	11.23	0.0390	0.005	38.22	2.1	0.10	4	8	1.00	.1.1...1	.....11.	.11....1	....
516	Amherstia	8.27	0.1627	0.008	73.10	1.7	0.10	3	8	1.00	.1.1...1	....111.	....1...	...1....
517	Edith	9.35	0.0387	0.002	91.12	2.1	0.10	4	10	1.00	.1.1...1	....111.	....	....
518	Halawe	11.00	0.2871	0.073	15.65	1.7	0.92	6	9	1.00	.111...1	....111.	.11....1	...1....
519	Sylvania	9.14	0.1676	0.017	48.25	2.3	0.99	2	5	1.00	.1.1...1	....111.	1	....
520	Franziska	10.61	0.1226	0.011	28.67	1.2	0.10	3	8	1.00	.111...1	....111.	.1.....1	....
521	Brixia	8.31	0.0626	0.002	115.65	2.0	0.10	12	36	0.92	.111...1	....111.	....	...1....
522	Helga	9.12	0.0388	0.003	101.22	3.5	0.10	5	12	0.71	.111...1	....111.	....11.1	1111....
523	Ada	9.60	0.2512	0.026	31.89	1.5	0.10	4	7	0.67	.111...1	....111.	.1.....1	....
524	Fidelio	9.83	0.0402	0.003	71.73	2.7	0.10	1	3	1.00	.1.....1	....111.	....	....
526	Jena	10.17	0.0877	0.009	41.49	2.0	0.10	5	10	0.83	.1.1...1	....111.	.1.....1	....
527	Euryanthe	10.10	0.0576	0.004	52.91	1.6	0.10	2	6	1.00	.1.1...1	....111.	1	....
528	Rezia	9.14	0.0561	0.004	83.42	3.0	0.10	2	6	1.00	.1.1...1	....111.	....1...	....
529	Preziosa	10.06	0.1632	0.017	32.01	1.5	0.10	4	9	0.67	.111...1	....111.	.1.....1	....
530	Turandot	9.29	0.0472	0.003	84.85	2.6	0.10	3	9	1.00	.111...1	....111.	1	....
531	Zerlina	11.80	0.1460	0.028	15.19	1.3	0.28	4	4	0.67	.111...1	.....1..	.1.....1	....
532	Herculina	5.81	0.1697	0.012	222.19	7.6	0.89	7	17	1.00	.111...1	....111.	....1...	1111....
533	Sara	9.67	0.2479	0.028	31.08	1.6	0.10	5	9	1.00	.1.1...1	....111.	.1.....1	....
534	Nassovia	9.77	0.1991	0.018	33.12	1.4	0.10	7	12	0.88	.1.1...1	....111.	.1..1..1	....
535	Montague	9.48	0.0514	0.007	74.49	4.6	0.97	8	24	1.00	.1.1...1	....111.	....	....
536	Merapi	8.08	0.0452	0.006	151.42	9.0	0.76	4	9	0.67	.111...1	....111.	....11..	1111....
537	Pauly	8.80	0.3489	0.046	39.11	2.3	0.10	3	7	0.75	.1.1...1	....111.	.1.....1	....
538	Friederike	9.30	0.0641	0.004	72.49	2.3	0.96	2	5	1.00	.1.1...1	....111.	....	....
539	Pamina	9.70	0.0800	0.011	53.97	3.4	0.88	5	14	1.00	.1.1...1	....111.	1	....
540	Rosamunde	10.76	0.2426	0.088	19.02	2.7	1.00	5	8	0.42	.1.1...1	....11..	.11.1..1	11......
541	Deborah	10.10	0.0496	0.005	57.01	2.9	0.98	4	11	1.00	.1.1...1	....111.	....	....
542	Susanna	9.36	0.1843	0.009	41.57	1.0	0.10	5	15	1.00	.1.1...1	....111.	1	....
543	Charlotte	9.40	0.2599	0.044	34.37	2.6	0.10	3	3	0.60	.111...1	.....1..	.1..1..1	11......
544	Jetta	9.90	0.3208	0.108	24.58	3.3	1.00	3	8	1.00	.1.1...1	....111.	..1....1	....
545	Messalina	8.84	0.0415	0.003	111.30	4.3	1.00	4	11	1.00	.1.1...1	....111.	....	....
546	Herodias	9.70	0.0534	0.007	66.02	3.8	0.99	11	32	1.00	.111...1	....111.	....	....
547	Praxedis	9.52	0.0566	0.004	69.68	2.2	0.10	2	6	1.00	.11....1	....111.	....	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW 12345678	AStatW 1111111 90123456	AStatW 11122222 78901234	AStatW 22222333 56789012
549	Jessonda	11.01	0.1971	0.015	18.81	0.7	0.10	8	20	1.00	.111...1	....111.	.1.....1	....
550	Senta	9.37	0.2215	0.052	37.75	3.8	0.94	3	9	0.75	.1.1...1	....111.	1	...1....
551	Ortrud	9.57	0.0426	0.005	78.46	4.1	0.62	4	12	1.00	.1.1...1	....111.	....	....
552	Sigelinde	9.40	0.0510	0.004	77.56	2.7	0.10	2	6	1.00	.111...1	....111.	1	...1....
554	Peraga	8.97	0.0496	0.005	95.87	4.1	1.00	14	37	0.88	.111...1	....111.	....1...	...1....
555	Norma	10.60	0.0632	0.005	40.11	1.5	0.10	2	6	1.00	.1.1...1	....111.	1	....
556	Phyllis	9.56	0.1853	0.011	37.81	1.1	0.10	4	11	1.00	.1.1...1	....111.	1	....
558	Carmen	9.09	0.1161	0.007	59.31	1.8	0.10	2	6	1.00	.1.1...1	....111.	....	....
559	Nanon	9.36	0.0500	0.004	79.82	2.7	0.10	2	5	1.00	.111...1	....111.	....	....
560	Delila	10.60	0.0733	0.005	37.24	1.3	0.10	8	23	0.89	.1.1...1	....111.	.1.....1	....
561	Ingwelde	11.21	0.0966	0.014	24.50	1.6	0.10	4	7	1.00	.111...1	....111.	.11....1	....
562	Salome	9.95	0.1967	0.026	30.67	1.8	0.11	4	7	0.80	.111...1	....111.	.1.....1	....
563	Suleika	8.50	0.2477	0.010	53.29	1.1	0.10	8	24	1.00	.1.1...1	....111.	....	....
564	Dudu	10.43	0.0484	0.011	49.57	4.9	1.00	10	29	1.00	.1.1...1	....111.	....	....
565	Marbachia	10.88	0.1033	0.007	27.57	0.9	0.10	5	13	1.00	.1.1...1	....111.	.1.....1	...1....
566	Stereoskopia	8.03	0.0383	0.003	168.16	6.3	0.10	1	3	1.00	.1.1...1	....111.	....	....
567	Eleutheria	9.16	0.0439	0.002	93.41	2.2	0.10	6	15	0.75	.111...1	....111.	....1...	1111....
568	Cheruskia	9.10	0.0535	0.002	86.99	1.8	0.10	6	17	1.00	.1.1...1	....111.	....	....
569	Misa	10.12	0.0297	0.001	72.95	1.6	0.10	5	15	1.00	.1.1...1	....111.	....	....
570	Kythera	8.81	0.0500	0.003	102.81	2.8	0.10	2	6	1.00	.1.1...1	....111.	....	....
572	Rebekka	10.94	0.0847	0.005	29.63	0.9	0.10	2	6	1.00	.1.1...1	....111.	1	....
573	Recha	9.60	0.1110	0.021	47.96	3.9	0.99	5	15	1.00	.1.1...1	....111.	1	...1....
574	Reginhild	12.30	0.3819	0.057	7.46	0.5	0.10	2	4	0.40	.111...1	....111.	.1.....1	....
575	Renate	10.90	0.1706	0.027	21.26	1.5	0.10	1	3	0.33	.1.....1	....111.	.1.....1	...1....
576	Emanuela	9.40	0.0428	0.005	84.68	4.4	0.82	5	15	0.83	.1.1...1	....111.	....	..11....
577	Rhea	9.50	0.1792	0.023	39.53	2.3	0.10	2	5	1.00	.111...1	....111.	....1..1	....
578	Happelia	9.20	0.0769	0.005	69.29	2.1	0.10	2	6	1.00	.1.1...1	....111.	....1...	....
579	Sidonia	7.85	0.1748	0.009	85.56	2.2	0.25	8	24	1.00	.1.1...1	....111.	....	....
580	Selene	9.60	0.1218	0.019	45.79	3.2	0.75	6	14	1.00	.111...1	....111.	.1.....1	....
581	Tauntonia	9.40	0.0758	0.005	63.66	2.1	0.20	9	26	1.00	.111...1	....111.	1	....
582	Olympia	9.11	0.2128	0.028	43.41	2.6	0.40	10	25	1.00	.1.1...1	....111.	..1....1	....
583	Klotilde	9.01	0.0660	0.005	81.64	2.8	0.21	8	23	1.00	.111...1	....111.	1	....
584	Semiramis	8.71	0.1987	0.011	54.01	1.4	0.10	4	11	1.00	.1.1...1	....111.	1	....
585	Bilkis	10.40	0.0362	0.002	58.09	1.3	0.10	6	15	1.00	.1.1...1	....111.	....	....
586	Thekla	9.21	0.0539	0.002	82.37	1.7	0.10	4	11	1.00	.1.1...1	....111.	....	....
588	Achilles	8.67	0.0328	0.002	135.47	4.1	0.10	7	15	1.00	.111...1	....111.	1	....
589	Croatia	9.14	0.0504	0.003	87.95	2.4	0.10	3	8	1.00	.1.1...1	....111.	....	....
590	Tomyris	9.90	0.1218	0.009	39.87	1.4	0.10	4	8	1.00	.111...1	....111.	....1..1	....
591	Irmgard	10.64	0.0364	0.002	51.86	1.3	0.10	8	23	1.00	.1.1...1	....111.	1	...1....
593	Titania	9.28	0.0604	0.009	75.32	5.0	0.96	5	13	1.00	.1.1...1	....111.	....	...1....
594	Mireille	12.01	0.3256	0.071	9.23	0.9	0.62	12	26	0.80	.1.1...1	....111.	.11.1..1	...1....
595	Polyxena	8.00	0.0937	0.004	109.07	2.2	0.10	5	13	0.83	.111...1	....111.	....	...1....
596	Scheila	8.90	0.0379	0.002	113.34	2.3	0.10	7	21	1.00	.111...1	....111.	....	....
597	Bandusia	9.40	0.2361	0.053	36.06	3.5	0.96	6	16	1.00	.111...1	....111.	..1.1..1	...1....
598	Octavia	9.53	0.0521	0.006	72.33	3.9	0.74	2	6	1.00	.1.1...1	....111.	....	....
599	Luisa	8.71	0.1377	0.008	64.87	1.9	0.10	5	13	1.00	.1.1...1	....111.	1	....
600	Musa	10.18	0.2415	0.022	24.90	1.1	0.10	5	11	0.83	.1.1...1	....111.	.1.....1	....
601	Nerthus	9.65	0.0454	0.003	73.32	2.4	0.77	9	26	1.00	.1.1...1	....111.	....	....
602	Marianna	8.31	0.0539	0.002	124.72	2.2	0.10	6	18	1.00	.111...1	....111.	....	....
603	Timandra	12.10	0.1354	0.019	13.73	0.9	0.10	2	4	0.33	.11....1	....11..	.1.....1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
604 Tekmessa	9.20	0.0870	0.012	65.16	4.1	0.97	4	10	1.00	.1.1...1	....111.	....	....
605 Juvisia	9.30	0.0684	0.010	70.14	4.6	0.98	7	20	1.00	.111...1	....111.	....	....
606 Brangane	10.38	0.0986	0.013	35.54	2.2	0.30	4	11	1.00	.111...1	....111.	.1.....1	....
607 Jenny	9.50	0.0711	0.005	62.78	2.1	0.54	4	11	1.00	.111...1	....111.	....	....
608 Adolfine	10.60	0.1603	0.034	25.18	2.3	0.10	2	2	0.40	..11...1	.....1..	.1.....1	....
609 Fulvia	10.00	0.0602	0.007	54.17	2.8	0.10	1	3	1.00	.1.....1	....111.	....1...	....
611 Valeria	9.19	0.1148	0.006	56.97	1.4	0.10	3	9	1.00	.1.1...1	....111.	....	....
612 Veronika	11.20	0.0411	0.003	37.74	1.2	0.10	8	21	1.00	.111...1	....111.	1	....
613 Ginevra	9.67	0.0374	0.002	80.04	2.0	0.10	4	10	1.00	.1.1...1	....111.	....	....
614 Pia	11.00	0.1056	0.013	25.81	1.5	0.10	3	5	1.00	.111...1	.....11.	.1.....1	....
615 Roswitha	10.36	0.0547	0.003	48.16	1.1	0.10	4	12	0.80	.111...1	....111.	1	....
616 Elly	10.68	0.2866	0.053	18.15	1.5	0.10	2	2	0.67	.111...1	.....1..	.1.....1	....
617 Patroclus	8.19	0.0471	0.003	140.92	4.7	0.10	4	8	1.00	.1.1...1	.....11.	1	....
618 Elfriede	8.26	0.0606	0.005	120.29	5.0	0.10	1	3	1.00	.1.....1	....111.	....	....
621 Werdandi	10.49	0.1527	0.018	27.15	1.5	0.10	4	9	0.80	.111...1	....111.	.1.....1	....
623 Chimaera	10.97	0.0372	0.002	44.09	1.0	0.10	3	8	1.00	.111...1	....111.	....	....
625 Xenia	10.00	0.2195	0.033	28.37	1.9	0.10	1	2	0.50	.1.1...1	....11..	.1.....1	....
626 Notburga	9.00	0.0437	0.002	100.73	2.0	0.10	8	23	1.00	.1.1...1	....111.	....	....
627 Charis	9.95	0.0786	0.009	48.51	2.6	0.38	10	28	1.00	.111...1	....111.	..1....1	....
628 Christine	9.25	0.1426	0.015	49.72	2.4	0.56	10	28	1.00	.111...1	....111.	....	....
630 Euphemia	11.00	0.2375	0.027	17.21	0.9	0.10	4	6	0.80	.111...1	....11..	.1.....1	....
631 Philippina	8.70	0.1760	0.008	57.65	1.2	0.10	4	11	1.00	.1.1...1	....111.	....	....
633 Zelima	9.73	0.1918	0.017	34.37	1.4	0.10	3	8	1.00	.1.1...1	....111.	.1.....1	....
634 Ute	9.60	0.0530	0.007	69.44	4.1	0.89	7	21	1.00	.111...1	....111.	....	...1....
635 Vundtia	9.01	0.0456	0.002	98.24	2.5	0.10	4	11	1.00	.1.1...1	....111.	....	....
636 Erika	9.50	0.0507	0.011	74.29	6.7	1.00	9	26	1.00	.111...1	....111.	....1..1	...1....
638 Moira	9.80	0.0494	0.002	65.57	1.5	0.10	5	15	1.00	.111...1	....111.	....	....
639 Latona	8.20	0.1826	0.009	71.25	1.7	0.10	5	15	1.00	.1.1...1	....111.	1	....
640 Brambilla	8.99	0.0686	0.004	80.79	2.3	0.10	4	11	1.00	.1.1...1	....111.	....1..1	....
642 Clara	9.98	0.1617	0.015	33.36	1.5	0.10	5	14	1.00	.111...1	....111.	.1.....1	....
643 Scheherezade	9.72	0.0446	0.004	71.57	2.8	0.44	8	23	1.00	.111...1	....111.	1	....
644 Cosima	11.13	0.1572	0.028	19.92	1.5	0.10	1	2	0.50	.1.1...1	.....11.	.1.....1	....
645 Agrippina	9.94	0.2381	0.025	28.00	1.3	0.10	6	17	1.00	.111...1	....111.	.11....1	....
648 Pippa	9.68	0.0509	0.002	68.27	1.6	0.10	4	12	1.00	.1.1...1	....111.	....	....
651 Antikleia	10.01	0.1603	0.024	33.04	2.2	0.10	2	3	0.67	.1.1...1	.....11.	.1.....1	....
652 Jubilatrix	11.40	0.1710	0.038	16.87	1.6	0.10	2	2	0.29	.111...1	...1.1..	.1.....1	....
653 Berenike	9.18	0.2444	0.034	39.22	2.4	0.36	8	24	1.00	11.1...1	....111.	.1.....1	....
654 Zelinda	8.52	0.0425	0.003	127.40	3.9	0.99	5	14	1.00	.1.1...1	....111.	....	....
655 Briseis	9.60	0.2693	0.036	30.79	1.9	0.10	3	4	0.38	.1.1...1	.....11.	.1..1..1	...1....
656 Beagle	10.00	0.0625	0.015	53.17	5.5	0.92	7	18	1.00	.111...1	....111.	..1....1	....
657 Gunlod	10.93	0.0415	0.003	42.52	1.4	0.10	3	8	1.00	.1.1...1	....111.	....	....
658 Asteria	10.54	0.2040	0.024	22.95	1.2	0.10	4	5	0.80	.111...1	.....11.	.1.....1	....
659 Nestor	8.99	0.0378	0.003	108.87	4.5	0.19	6	16	1.00	.1.1...1	....111.	1	....
660 Crescentia	9.14	0.2186	0.011	42.24	1.0	0.10	4	9	1.00	.111...1	....111.	....	...1....
661 Cloelia	9.63	0.1076	0.007	48.05	1.5	0.10	7	20	1.00	.1.1...1	....111.	1	....
662 Newtonia	10.50	0.1999	0.028	23.62	1.5	0.10	2	3	1.00	.111...1	....11..	.1..1..1	...1....
663 Gerlinde	9.21	0.0359	0.002	100.88	3.0	0.68	4	9	1.00	.111...1	....111.	....1...	1111....
664 Judith	9.97	0.0344	0.003	72.68	2.8	0.10	2	6	1.00	..11..11	....111.	1	...1....
665 Sabine	8.10	0.3895	0.039	51.09	2.4	0.10	4	10	0.80	.1.1...1	....111.	.1.....1	....
666 Desdemona	10.90	0.1065	0.008	26.91	1.0	0.10	5	14	0.83	.1.1...1	....111.	.1.....1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
667 Denise	8.90	0.0737	0.003	81.28	1.7	0.10	6	15	1.00	.111...1	....111.	....	....
668 Dora	11.80	0.0467	0.003	26.84	0.7	0.10	3	9	1.00	.11....1	....111.	1	....
669 Kypria	10.24	0.1405	0.012	31.75	1.3	0.98	3	4	1.00	.111...1	....111.	.1.....1	....
670 Ottegebe	9.80	0.1830	0.015	34.07	1.3	0.41	8	20	1.00	.111...1	....111.	1	....
671 Carnegia	10.00	0.0512	0.011	58.72	5.6	0.88	6	17	1.00	.1.1...1	....111.	..1.1..1	1111....
673 Edda	10.20	0.1044	0.006	37.53	1.0	0.10	7	20	0.88	.111...1	....111.	1	....
674 Rachele	7.42	0.2007	0.019	97.35	4.3	0.95	9	26	1.00	.1.1...1	....111.	....	....
676 Melitta	9.30	0.0526	0.002	79.99	1.4	0.10	8	23	1.00	.1.1...1	....111.	....1...	...1....
677 Aaltje	9.70	0.2794	0.037	28.87	1.7	0.10	3	5	1.00	.111...1	....111.	.1.....1	....
678 Fredegundis	9.02	0.2494	0.026	41.80	2.0	1.00	5	14	1.00	.111...1	....111.	....1...	...1....
679 Pax	9.02	0.1646	0.017	51.45	2.4	0.10	1	3	0.33	11	....111.	....	....
680 Genoveva	9.31	0.0474	0.002	83.92	1.4	0.10	9	26	0.90	.1.1...1	....111.	....	...1....
683 Lanzia	8.72	0.0855	0.075	81.98	22.2	1.00	3	8	1.00	.111..11	....111.	..1.....	....
685 Hermia	11.80	0.2807	0.050	10.95	0.9	0.10	1	2	0.50	.1.....1	....11..	.1.....1	....
686 Gersuind	9.67	0.1416	0.037	41.13	4.5	0.98	6	17	1.00	.1.1...1	....111.	.11....1	....
688 Melanie	10.59	0.0599	0.010	41.40	3.1	0.65	4	12	1.00	.1.1...1	....111.	1	....
689 Zita	12.15	0.1183	0.011	14.36	0.6	0.10	4	10	0.80	.111...1	....111.	.1.....1	....
690 Wratislavia	7.76	0.0763	0.005	135.04	3.8	0.10	2	6	1.00	.1.1...1	....111.	....	....
691 Lehigh	9.30	0.0438	0.002	87.68	1.7	0.10	8	24	1.00	.1.1...1	....111.	....	...1....
692 Hippodamia	9.18	0.1785	0.015	45.90	1.8	0.36	5	15	1.00	.111...1	....111.	1	....
693 Zerbinetta	9.38	0.0683	0.003	67.66	1.3	0.10	7	19	1.00	.111...1	....111.	....	....
694 Ekard	9.17	0.0460	0.004	90.78	4.0	0.73	9	24	1.00	.111...1	....111.	....	...1....
695 Bella	9.30	0.1450	0.009	48.18	1.5	0.24	4	12	1.00	.111...1	....111.	....1..1	...1....
696 Leonora	9.00	0.0773	0.004	75.76	2.0	0.14	3	9	1.00	.1.1...1	....111.	....1...	...1....
697 Galilea	9.63	0.0387	0.002	80.14	1.7	0.10	4	11	1.00	.1.1...1	....111.	....	....
698 Ernestina	10.70	0.1269	0.012	27.03	1.2	0.10	4	10	1.00	..11..11	....111.	.1.....1	....
700 Auravictrix	11.20	0.2455	0.031	15.44	0.9	0.27	6	15	0.67	.1.1...1	....111.	.11....1	....
701 Oriola	9.25	0.2184	0.024	40.18	2.1	0.10	4	9	0.80	.1.1...1	....111.	....11.1	1111....
702 Alauda	7.25	0.0587	0.002	194.73	3.2	0.10	9	26	1.00	.111...1	....111.	....	....
704 Interamnia	5.94	0.0742	0.002	316.62	5.2	0.10	10	28	1.00	.111...1	....111.	....	....
705 Erminia	8.39	0.0432	0.002	134.22	2.3	0.10	9	25	1.00	.111...1	....111.	....	....
706 Hirundo	10.20	0.1721	0.019	29.22	1.5	0.10	3	9	1.00	.111...1	....111.	.1.....1	....
708 Raphaela	10.61	0.2193	0.034	21.43	1.5	0.10	2	3	0.67	.111...1	....11..	.1.....1	....
709 Fringilla	9.04	0.0459	0.003	96.56	3.4	0.44	4	10	0.57	.1.1...1	....111.	....	....
710 Gertrud	11.10	0.0893	0.011	26.81	1.5	0.10	5	9	0.83	.111...1	....111.	.1.....1	....
712 Boliviana	8.32	0.0510	0.002	127.57	2.2	0.10	14	41	0.93	.111...1	....111.	....	...1....
713 Luscinia	8.97	0.0410	0.003	105.52	3.1	0.10	2	6	1.00	.1.1...1	....111.	....	...1....
714 Ulula	9.07	0.2711	0.037	39.18	2.4	0.70	4	12	1.00	.1.1...1	....111.	1	....
715 Transvaalia	9.80	0.2606	0.048	28.55	2.3	0.65	7	14	0.88	.111...1	....111.	.1..1..1	....
716 Berkeley	10.84	0.1801	0.028	21.28	1.5	0.10	2	3	1.00	.111...1	.....11.	.1.....1	....
717 Wisibada	11.10	0.0666	0.026	31.04	4.7	0.97	9	20	0.90	.111...1	....111.	.11....1	....
718 Erida	9.80	0.0399	0.006	72.94	4.9	1.00	7	20	1.00	.1.1...1	....111.	....1..1	..11....
720 Bohlinia	9.71	0.2029	0.018	33.73	1.4	0.10	6	17	0.86	.111...1	....111.	1	....
721 Tabora	9.26	0.0604	0.004	76.07	2.5	0.10	5	9	1.00	..11...1	....111.	....1..1	11......
723 Hammonia	9.70	0.1829	0.015	35.68	1.4	0.10	4	9	1.00	.111...1	....111.	1	....
725 Amanda	11.81	0.0721	0.017	21.51	2.2	0.26	3	3	1.00	.111...1	.....1..	.1.....1	....
726 Joella	10.57	0.0549	0.005	43.61	1.7	0.10	3	9	1.00	.1.1...1	....111.	1	....
727 Nipponia	9.62	0.2423	0.025	32.17	1.5	0.10	7	16	0.88	.111...1	....111.	.11....1	....
729 Watsonia	9.31	0.1381	0.009	49.15	1.5	0.10	6	17	1.00	.111...1	....111.	1	....
731 Sorga	9.62	0.1436	0.015	41.78	2.0	0.10	4	10	0.80	.1.1...1	....111.	1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
732	Tjilaki	10.70	0.0655	0.006	37.61	1.6	0.10	1	3	1.00	.1.1...1	....111.	....	...1....
733	Mocia	9.05	0.0542	0.010	88.40	7.1	0.95	4	12	1.00	.1.1...1	....111.	....1...	...1....
734	Benda	9.70	0.0464	0.004	70.82	2.9	0.10	4	10	0.67	.1.1...1	....111.	....1..1	1111....
735	Marghanna	9.55	0.0484	0.002	74.32	1.6	0.10	7	21	0.88	.1.1...1	....111.	....	...1....
736	Harvard	11.64	0.1406	0.011	16.66	0.6	0.10	9	19	0.82	.111...1	....111.	.1.....1	....
737	Arequipa	8.81	0.2723	0.018	44.07	1.4	0.10	2	5	1.00	.1.1...1	....111.	....	..11....
738	Alagasta	10.13	0.0398	0.002	62.79	1.2	0.10	8	23	0.80	.1.1...1	....111.	1	....
739	Mandeville	8.66	0.0526	0.003	107.38	2.5	0.10	4	12	1.00	.111...1	....111.	....	....
740	Cantabia	8.97	0.0552	0.002	90.90	1.7	0.10	10	28	1.00	.1.1...1	....111.	....	....
741	Botolphia	10.40	0.1391	0.014	29.64	1.3	0.10	3	9	1.00	.111...1	....111.	1	....
742	Edisona	9.55	0.1286	0.022	45.60	3.5	0.76	8	23	1.00	.1.1...1	....111.	1	....
743	Eugenisis	10.00	0.0625	0.003	53.18	1.1	0.10	6	18	1.00	.1.1...1	....111.	....	....
744	Aguntina	10.21	0.0423	0.012	58.69	7.0	1.00	9	25	1.00	.111...1	....111.	..1....1	....
746	Marlu	10.00	0.0363	0.005	69.75	4.0	0.44	5	14	0.83	.111...1	....111.	....1..1	...1....
747	Winchester	7.69	0.0503	0.002	171.70	3.1	0.10	9	24	1.00	.1.1...1	....111.	....	...1....
748	Simeisa	9.01	0.0415	0.002	102.97	2.2	0.10	4	12	1.00	.1.1...1	....111.	....	....
750	Oskar	12.13	0.0587	0.009	20.57	1.4	0.10	2	3	0.67	.111...1	....11..	.1.....1	....
751	Faina	8.66	0.0497	0.004	110.50	4.3	0.99	7	16	1.00	.111...1	....111.	....1...	1111....
752	Sulamitis	10.10	0.0409	0.002	62.77	1.4	0.10	6	16	1.00	.111...1	....111.	....11.1	11......
753	Tiflis	10.21	0.2616	0.046	23.59	1.8	0.10	1	2	0.25	..1...11	...111..	.1..1..1	....
754	Malabar	9.19	0.0485	0.007	87.62	5.6	0.98	10	30	1.00	.111...1	....111.	....	....
755	Quintilla	9.81	0.1621	0.021	36.04	2.1	0.10	3	7	0.75	.1.1...1	....111.	.1.....1	....
756	Lilliana	9.60	0.0500	0.002	71.50	1.4	0.10	5	15	1.00	.1.1...1	....111.	....	....
757	Portlandia	10.20	0.1427	0.014	32.09	1.4	0.22	3	9	1.00	.1.1...1	....111.	1	....
758	Mancunia	8.16	0.1317	0.023	85.48	6.7	0.95	5	13	1.00	.1.1...1	....111.	....	...1....
759	Vinifera	10.50	0.0548	0.007	45.11	2.6	0.10	2	5	1.00	.1.1...1	....111.	1	....
760	Massinga	7.96	0.2276	0.012	71.29	1.9	0.10	3	9	0.75	.1.1...1	....111.	....1...	....
762	Pulcova	8.28	0.0458	0.002	137.09	3.2	0.10	4	12	1.00	.1.1...1	....111.	....	....
764	Gedania	9.48	0.0840	0.004	58.28	1.4	0.10	4	12	1.00	.1.1...1	....111.	....1..1	...1....
766	Moguntia	10.15	0.1572	0.025	31.28	2.3	0.51	4	9	0.80	.111...1	....111.	.1..1..1	....
767	Bondia	10.00	0.1024	0.015	41.54	2.7	0.23	4	7	0.80	.111...1	....111.	.1.....1	....
769	Tatjana	8.90	0.0429	0.002	106.44	2.6	0.10	3	8	1.00	.1.1...1	....111.	....	....
770	Bali	10.93	0.2896	0.043	16.10	1.1	0.10	1	3	1.00	.1.....1	....111.	1	....
771	Libera	10.49	0.1303	0.010	29.38	1.1	0.10	2	6	1.00	.1.1...1	....111.	....	....
772	Tanete	8.33	0.0594	0.004	117.66	4.0	0.62	9	27	1.00	.111...1	....111.	....	...1....
773	Irmintraud	9.10	0.0440	0.002	95.88	1.8	0.10	6	18	1.00	.1.1...1	....111.	....	....
774	Armor	8.60	0.2529	0.020	50.37	1.9	0.10	2	6	1.00	.111...1	....111.	1	....
775	Lumiere	10.40	0.1083	0.011	33.59	1.6	0.10	5	7	0.83	.111...1	....111.	.1.....1	....
776	Berbericia	7.68	0.0655	0.004	151.17	4.0	0.10	2	5	1.00	..11..11	....111.	....	....
777	Gutemberga	9.80	0.0494	0.003	65.57	1.9	0.10	5	15	1.00	.1.1...1	....111.	....1..1	....
778	Theobalda	9.66	0.0589	0.004	64.06	1.9	0.10	7	19	1.00	.111...1	....111.	1	....
779	Nina	8.30	0.1440	0.016	76.62	4.0	0.76	6	17	0.75	.111...1	....111.	....1...	...1....
780	Armenia	9.00	0.0498	0.002	94.40	1.7	0.10	6	17	1.00	.111...1	....111.	....	....
781	Kartvelia	9.40	0.0704	0.014	66.02	5.6	0.98	5	13	1.00	.111...1	....111.	1	....
782	Montefiore	11.50	0.3119	0.037	11.93	0.6	0.10	3	5	0.75	.11....1	....11..	.1.....1	...1....
783	Nora	10.60	0.0635	0.003	40.03	0.8	0.10	5	14	1.00	.1.1...1	....111.	....	....
784	Pickeringia	9.00	0.0555	0.005	89.42	3.4	0.10	2	5	1.00	.111...1	....111.	1	....
785	Zwetana	9.45	0.1245	0.010	48.54	1.8	0.10	1	3	1.00	.1.....1	....111.	....	....
786	Bredichina	8.65	0.0730	0.011	91.60	6.2	0.95	6	16	1.00	.1.1...1	....111.	....	....
787	Moskva	10.00	0.2352	0.057	27.41	2.8	0.78	5	15	1.00	.1.1...1	....111.	.1.....1	...1....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
788	Hohensteina	8.30	0.0787	0.005	103.68	3.4	0.10	2	5	1.00	.1.1...1	....111.	....	....
790	Pretoria	8.00	0.0384	0.001	170.37	2.6	0.10	9	24	0.90	.111...1	....111.	....1...	1111....
791	Ani	9.25	0.0329	0.001	103.52	1.9	0.10	6	17	0.86	.1.1...1	....111.	....1...	...1....
792	Metcalfia	10.33	0.0354	0.002	60.73	1.4	0.11	5	15	1.00	.1.1...1	....111.	....	....
793	Arizona	10.26	0.1659	0.010	28.95	0.9	0.10	3	8	1.00	.1.1...1	....111.	1	....
795	Fini	9.70	0.0418	0.002	74.66	1.4	0.10	6	17	1.00	.111...1	....111.	....	...1....
796	Sarita	9.12	0.1966	0.013	44.95	1.5	0.10	2	6	1.00	.1.1...1	....111.	....	....
798	Ruth	9.44	0.1583	0.022	43.24	2.3	0.49	14	40	0.88	.111...1	....111.	.1.....1	...1....
799	Gudula	10.30	0.0704	0.009	43.63	2.5	0.79	9	25	1.00	.111...1	....111.	1	....
801	Helwerthia	11.55	0.0384	0.007	33.23	2.5	0.68	9	24	0.90	.111...1	....111.	.11....1	...1....
803	Picka	9.60	0.1181	0.012	46.50	2.2	0.10	5	14	1.00	.111...1	....111.	....1..1	...1....
804	Hispania	7.84	0.0522	0.004	157.25	5.3	0.82	7	18	0.88	.1.1...1	....111.	....1...	1111....
805	Hormuthia	9.82	0.0465	0.004	66.94	2.9	0.10	4	10	1.00	.111...1	....111.	1	....
806	Gyldenia	10.60	0.0259	0.001	62.63	1.3	0.10	5	14	1.00	.1.1...1	....111.	....	....
807	Ceraskia	10.56	0.1532	0.016	26.24	1.3	0.10	5	10	1.00	.111...1	....111.	.1.....1	....
808	Merxia	9.70	0.2207	0.035	32.49	2.3	0.52	4	12	1.00	.1.1...1	....111.	.1.....1	....
813	Baumeia	11.70	0.2027	0.040	13.50	1.2	0.10	2	2	0.40	.111...1	.....1..	.1.....1	....
814	Tauris	8.75	0.0466	0.003	109.55	3.1	0.33	2	5	1.00	.1.1...1	....111.	....	....
816	Juliana	10.00	0.0490	0.002	60.02	1.2	0.10	8	23	1.00	.111...1	....111.	....	...1....
817	Annika	10.80	0.1740	0.030	22.05	1.7	0.35	2	4	0.33	.1.1...1	....11..	.1.....1	....
818	Kapteynia	9.10	0.1655	0.029	49.45	3.9	0.46	2	6	1.00	.1.1...1	....111.	1	....
820	Adriana	10.30	0.0387	0.003	58.82	2.5	0.33	9	26	1.00	.111...1	....111.	1	....
823	Sisigambis	11.20	0.2100	0.040	16.69	1.4	0.10	2	2	0.22	.111...1	...1.1..	.1.....1	....
824	Anastasia	10.41	0.1039	0.040	34.14	5.1	1.00	4	11	1.00	.111...1	....111.	..1....1	....
825	Tanina	11.50	0.3545	0.049	11.19	0.7	0.10	5	6	0.63	.111...1	....11..	.11....1	....
826	Henrika	11.30	0.1435	0.042	19.28	2.3	0.78	4	11	0.80	.1.1...1	....111.	.11....1	....
828	Lindemannia	10.33	0.0457	0.003	53.39	1.5	0.10	6	17	0.60	.1.1...1	....111.	1	...1....
829	Academia	10.70	0.0484	0.003	43.76	1.3	0.10	2	5	1.00	.1.....1	....111.	....1...	....
830	Petropolitana	9.10	0.2382	0.020	41.22	1.6	0.10	6	12	0.86	.111...1	....111.	.1.....1	....
834	Burnhamia	9.39	0.0698	0.005	66.65	2.4	0.81	11	32	1.00	.1.1...1	....111.	....	....
835	Olivia	11.30	0.0418	0.006	35.75	2.3	0.10	3	5	0.50	.111...1	....111.	.1.....1	....
838	Seraphina	10.09	0.0455	0.004	59.81	2.3	0.10	3	8	1.00	.1.1...1	....111.	1	...1....
839	Valborg	10.20	0.3534	0.028	20.39	0.8	0.10	6	11	0.60	.1.1...1	....111.	.1..1..1	...1....
842	Kerstin	10.80	0.0552	0.009	39.16	2.8	0.26	7	12	1.00	.111...1	....111.	.11....1	....
845	Naema	9.70	0.0788	0.009	54.37	2.8	0.80	6	17	1.00	.111...1	....111.	....1..1	....
846	Lipperta	10.26	0.0506	0.003	52.41	1.4	0.10	3	9	1.00	.1.1...1	....111.	....	....
847	Agnia	10.29	0.1720	0.022	28.04	1.7	0.10	5	7	1.00	.111...1	....111.	.1.....1	....
849	Ara	8.10	0.2660	0.031	61.82	3.3	0.10	2	4	1.00	..11..11	....11..	....1..1	..11....
850	Altona	9.60	0.0390	0.002	80.90	1.8	0.10	4	11	1.00	.1.1...1	....111.	....	....
851	Zeissia	11.62	0.2646	0.050	12.26	1.0	0.10	1	2	0.09	.1.1...1	...111..	.1..1..1	...1....
852	Wladilena	10.09	0.3135	0.041	22.78	1.4	0.10	2	3	1.00	.1.1...1	....11..	.1.....1	....
853	Nansenia	11.67	0.0521	0.003	27.00	0.8	0.10	6	16	1.00	.111...1	....111.	1	....
857	Glasenappia	11.32	0.2318	0.024	15.03	0.7	0.10	6	7	0.55	.111...1	....111.	.1.....1	...1....
858	El Djezair	10.00	0.3197	0.085	23.51	2.6	0.49	3	4	0.50	.111...1	....11..	.11....1	....
859	Bouzareah	9.60	0.0467	0.003	73.97	2.0	0.10	6	17	1.00	.1.1...1	....111.	1	....
860	Ursina	10.26	0.1618	0.020	29.32	1.6	0.10	2	5	1.00	.111...1	....111.	.1.....1	....
861	Aida	9.60	0.0571	0.007	66.85	3.7	0.83	14	39	1.00	.111...1	....111.	1	.....1..
862	Franzia	10.60	0.1368	0.015	27.26	1.4	0.10	5	7	1.00	.111...1	....111.	.1.....1	....
863	Benkoela	9.02	0.5952	0.070	27.06	1.5	0.10	3	3	1.00	.111...1	.....1..	.1.....1	....
865	Zubaida	11.90	0.0972	0.014	17.77	1.1	0.10	3	4	0.75	11.1...1	....11..	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
866	Fatme	9.20	0.0473	0.002	88.31	2.0	0.87	4	11	1.00	.1.1...1	....111.	....	....
867	Kovacia	11.30	0.0923	0.019	24.04	2.2	0.10	2	2	0.40	.1.1...1	.....1..	.1.....1	...1....
868	Lova	10.22	0.0524	0.003	52.47	1.5	0.10	4	11	1.00	.111...1	....111.	....	....
869	Mellena	12.40	0.0565	0.005	18.52	0.8	0.10	5	11	1.00	.111...1	....111.	.1.....1	....
872	Holda	9.91	0.2127	0.041	30.04	2.5	0.44	3	9	1.00	.1.1...1	....111.	..1....1	....
873	Mechthild	11.49	0.0531	0.008	29.04	1.9	0.10	2	3	1.00	.1.1...1	.....11.	.1.....1	....
874	Rotraut	10.00	0.0554	0.013	56.47	5.5	0.99	5	15	1.00	.1.1...1	....111.	..1....1	....
875	Nymphe	11.50	0.2346	0.022	13.75	0.6	0.10	2	4	1.00	.1.1...1	....11..	.1.....1	....
877	Walkure	10.71	0.0623	0.005	38.41	1.4	0.10	2	6	1.00	.1.1...1	....111.	....	...1....
882	Swetlana	10.50	0.0588	0.006	43.55	2.2	0.10	3	5	0.50	.111...1	....111.	....1..1	...1....
885	Ulrike	10.70	0.0830	0.034	33.43	5.3	0.97	2	6	1.00	.1.1...1	....111.	..1.1..1	....
886	Washingtonia	8.70	0.0713	0.025	90.56	12.6	1.00	13	37	1.00	.111..11	....111.	.11....1	...1....
888	Parysatis	9.51	0.1404	0.008	44.46	1.3	0.10	9	26	1.00	.111...1	....111.	1	....
890	Waltraut	10.78	0.1153	0.016	27.33	1.7	0.10	2	3	1.00	.1.1...1	....11..	.1.....1	....
891	Gunhild	9.90	0.0718	0.018	51.95	5.6	1.00	3	9	1.00	.1.1...1	....111.	....1..1	....
892	Seeligeria	9.80	0.0369	0.002	75.86	1.6	0.10	6	17	1.00	.1.1...1	....111.	1	...1....
893	Leopoldina	9.47	0.0497	0.006	76.13	4.5	0.86	7	21	1.00	.111...1	....111.	....	....
894	Erda	9.80	0.1627	0.018	36.13	1.9	0.10	3	5	0.75	.111...1	....111.	.1.....1	....
895	Helio	8.30	0.0420	0.002	141.90	3.5	0.10	2	6	1.00	.1.1...1	....111.	....1...	....
896	Sphinx	11.80	0.1971	0.017	13.07	0.5	0.10	5	12	1.00	.111...1	....111.	.1.....1	....
897	Lysistrata	10.37	0.2619	0.036	21.90	1.4	1.00	5	13	0.71	.1.1...1	....111.	.1.....1	....
899	Jokaste	10.14	0.2026	0.014	27.69	0.9	0.10	7	20	0.88	.1.1...1	....111.	1	....
900	Rosalinde	11.74	0.1008	0.017	18.78	1.4	0.10	3	4	1.00	.111...1	.....11.	.1.....1	....
903	Nealley	9.80	0.0528	0.004	63.43	2.0	0.34	5	15	1.00	.1.1...1	....111.	....	...1....
904	Rockefellia	9.90	0.0561	0.003	58.75	1.7	0.10	5	14	1.00	.111...1	....111.	1	....
905	Universitas	11.59	0.0895	0.024	21.36	2.4	0.10	1	2	0.13	..1....1	...111..	..1....1	....
907	Rhoda	9.76	0.0560	0.003	62.73	1.7	0.10	4	12	1.00	.1.1...1	....111.	....	....
908	Buda	10.69	0.1576	0.015	24.37	1.1	0.10	4	8	1.00	.111...1	....111.	.1.....1	....
909	Ulla	8.95	0.0343	0.001	116.44	2.4	0.10	4	11	1.00	.111...1	....111.	....	....
910	Anneliese	10.30	0.0605	0.013	47.07	4.5	0.75	3	8	1.00	.1.1...1	....111.	.1.....1	...1....
911	Agamemnon	7.89	0.0444	0.002	166.66	3.9	0.10	6	18	1.00	.1.1...1	....111.	1	....
912	Maritima	8.40	0.1115	0.006	83.17	2.0	0.55	3	8	1.00	.111...1	....111.	....	...1....
914	Palisana	8.76	0.0943	0.004	76.61	1.7	0.10	4	12	1.00	.111...1	....111.	....1...	....
916	America	11.20	0.0530	0.004	33.23	1.3	0.15	6	16	1.00	.111...1	....111.	.1.....1	....
917	Lyka	11.00	0.0891	0.031	28.10	3.9	0.99	3	6	0.60	.1.1...1	....111.	.11....1	....
918	Itha	10.70	0.2220	0.048	20.44	1.9	0.10	1	2	0.50	.1.....1	.....11.	.1.....1	....
919	Ilsebill	11.30	0.0698	0.010	27.65	1.7	0.10	1	3	1.00	.1.....1	....111.	....1..1	..11....
920	Rogeria	11.19	0.1035	0.008	23.89	0.9	0.10	7	21	1.00	.1.1...1	....111.	.1.....1	....
921	Jovita	10.60	0.0297	0.003	58.48	2.4	0.10	2	5	1.00	.1.1...1	....111.	....1..1	....
923	Herluga	11.50	0.0421	0.002	32.47	0.8	0.10	4	11	1.00	.1.1...1	....111.	....1...	....
924	Toni	9.37	0.0432	0.003	85.49	2.5	0.87	9	25	1.00	.111...1	....111.	....	....
925	Alphonsina	8.33	0.2786	0.038	54.34	3.4	0.96	12	35	1.00	.1.1...1	....111.	1	...1....
926	Imhilde	10.30	0.0570	0.003	48.48	1.1	0.10	8	22	0.89	.111...1	....111.	1	....
927	Ratisbona	9.54	0.0593	0.003	67.47	1.5	0.10	4	12	1.00	.111...1	....111.	....	....
928	Hildrun	9.40	0.0687	0.004	66.83	1.7	0.10	7	18	1.00	.111...1	....111.	1	....
930	Westphalia	11.40	0.0366	0.003	36.48	1.4	0.10	2	6	1.00	.1.1...1	....111.	1	....
931	Whittemora	9.26	0.1704	0.028	45.27	3.4	0.39	10	16	0.83	.111...1	....111.	.11....1	....
933	Susi	11.80	0.0704	0.012	21.87	1.6	0.34	4	9	1.00	.111...1	....111.	.11....1	....
934	Thuringia	10.30	0.0471	0.011	53.35	5.2	0.97	11	31	1.00	.111...1	....111.	1	...1....
935	Clivia	12.90	0.1974	0.037	7.87	0.7	0.10	3	3	0.50	.111...1	.....1..	.1.....1	....

IMPS Albedos and Diameters

ID/I	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
936	Kunigunde	10.00	0.1129	0.007	39.56	1.2	0.10	9	23	0.75	.111...1	....111.	.1.....1	...1....
938	Chlosinde	10.80	0.1178	0.025	26.79	2.5	0.10	1	2	1.00	..11...1	....11..	.1..1..1	...1....
940	Kordula	9.55	0.0352	0.002	87.21	2.6	0.10	2	6	1.00	..11..11	....111.	....1...	...1....
943	Begonia	9.77	0.0456	0.004	69.21	3.0	1.00	4	11	1.00	.1.....1	....111.	....	....
945	Barcelona	10.13	0.2416	0.024	25.47	1.2	0.40	2	4	1.00	.111...1	....111.	.1.....1	....
946	Poesia	10.42	0.0627	0.015	43.75	4.6	0.69	9	15	0.64	.111...1	....111.	.11....1	...1....
947	Monterosa	9.80	0.2937	0.040	26.90	1.7	0.71	7	21	1.00	.111...1	....111.	1	....
949	Hel	9.70	0.0487	0.002	69.17	1.4	0.10	6	17	1.00	.1.1...1	....111.	....	....
950	Ahrensa	11.60	0.1793	0.054	15.03	1.8	0.68	7	15	1.00	.1.1...1	....111.	.11....1	....
952	Caia	9.20	0.0554	0.007	81.61	4.6	0.83	4	12	1.00	.1.1...1	....111.	....	....
953	Painleva	10.30	0.1670	0.013	28.33	1.1	0.10	4	11	1.00	.1.1...1	....111.	.1.....1	...1....
954	Li	9.94	0.0555	0.003	58.03	1.3	0.10	6	18	1.00	.1.1...1	....111.	....	....
955	Alstede	11.10	0.2135	0.028	17.33	1.0	0.40	6	12	0.86	.111...1	....111.	.1.....1	....
957	Camelia	9.70	0.0429	0.002	73.73	1.5	0.10	4	12	1.00	.111...1	....111.	....	....
958	Asplinda	10.71	0.0415	0.013	47.08	6.2	0.84	4	10	1.00	.111...1	....111.	.11....1	....
959	Arne	10.20	0.0446	0.002	57.42	1.5	0.10	8	21	1.00	.111...1	....111.	1	....
961	Gunnie	11.30	0.0373	0.002	37.82	0.9	0.10	5	14	0.71	.111...1	....111.	1	....
965	Angelica	9.80	0.0739	0.004	53.63	1.3	0.10	4	11	1.00	.1.1...1	....111.	1	....
966	Muschi	9.91	0.3497	0.035	23.43	1.1	0.10	3	5	1.00	.1.1...1	....111.	.1.....1	....
967	Helionape	12.10	0.1782	0.034	11.97	1.0	0.10	2	2	0.29	.11....1	...1.1..	.1.....1	....
968	Petunia	10.01	0.2242	0.055	27.94	2.9	0.10	1	2	0.14	.1.1...1	...1.11.	.1.....1	....
969	Leocadia	12.57	0.0435	0.003	19.51	0.7	0.10	2	6	1.00	.1.1...1	....111.	....1..1	....
971	Alsatia	10.05	0.0415	0.002	63.75	1.7	0.10	4	11	0.80	.111...1	....111.	....	....
972	Cohnia	9.50	0.0489	0.003	75.65	1.9	0.10	5	14	1.00	.1.1...1	....111.	1	....
973	Aralia	9.60	0.0959	0.006	51.60	1.6	0.10	5	15	1.00	.1.1...1	....111.	1	....
974	Lioba	10.30	0.3965	0.138	18.39	2.6	0.35	2	2	0.67	.111...1	.....1..	.1.....1	....
975	Perseverantia	10.41	0.1726	0.024	26.49	1.7	0.10	2	3	0.50	..1...11	.....11.	.1..1..1	....
976	Benjamina	9.22	0.0559	0.004	80.53	2.5	0.10	2	6	1.00	.111...1	....111.	....	....
977	Philippa	9.67	0.0555	0.010	65.67	5.3	1.00	8	19	1.00	.111...1	....111.	1	..11....
978	Aidamina	9.73	0.0365	0.002	78.73	2.3	0.10	6	17	1.00	.1.1...1	....111.	1	....
979	Ilsewa	9.80	0.1567	0.024	36.82	2.5	1.00	8	18	0.80	.111...1	....111.	.1.....1	...1....
980	Anacostia	7.85	0.1723	0.006	86.19	1.6	0.10	7	21	1.00	.111...1	....111.	....	....
981	Martina	10.57	0.1254	0.016	28.87	1.7	0.25	2	6	1.00	.1.....1	....111.	1	....
983	Gunila	9.58	0.0477	0.002	73.87	1.3	0.10	8	24	1.00	.111...1	....111.	....	...1....
984	Gretia	9.03	0.4239	0.095	31.91	3.1	0.99	4	12	1.00	.1.1...1	....111.	1	....
986	Amelia	9.40	0.1183	0.006	50.94	1.2	0.10	6	18	1.00	.111...1	....111.	1	....
987	Wallia	9.30	0.1765	0.009	43.67	1.0	0.10	5	14	1.00	.1.1...1	....111.	....	....
988	Appella	11.20	0.0871	0.009	25.91	1.2	0.10	8	18	0.89	.111...1	....111.	.11....1	....
989	Schwassmannia	11.80	0.2035	0.027	12.86	0.8	0.10	2	3	1.00	.111...1	....11..	.1..1..1	....
990	Yerkes	11.50	0.1303	0.018	18.46	1.2	0.65	4	10	1.00	.111...1	....111.	.1.....1	...1....
991	McDonalda	11.12	0.0638	0.009	31.41	2.1	0.51	6	15	1.00	.111...1	....111.	.1.....1	....
992	Swasey	10.80	0.1132	0.013	27.33	1.4	0.10	5	7	0.71	.111...1	....111.	.1.....1	....
994	Otthild	10.30	0.2247	0.032	24.42	1.6	0.10	3	4	0.75	.1.1...1	....111.	.1.....1	....
995	Sternberga	10.30	0.1341	0.005	31.62	0.6	0.10	7	20	1.00	.1.1...1	....111.	1	....
996	Hilaritas	10.88	0.0901	0.009	29.53	1.3	0.10	9	15	0.82	.111...1	....111.	.1.....1	....
997	Priska	12.00	0.0801	0.016	18.70	1.6	0.10	2	2	0.50	.111...1	.....1..	.1.....1	....
998	Bodea	11.90	0.0211	0.004	38.16	3.1	0.10	1	2	0.14	..1....1	...1.11.	....1..1	....
1000	Piazzia	9.80	0.0935	0.008	47.66	2.0	0.10	9	17	1.00	1111...1	....111.	.11.1..1	...1....
1001	Gaussia	9.77	0.0392	0.004	74.67	3.8	0.10	1	3	0.33	.1.1...1	....111.	1	....
1002	Olbersia	11.10	0.0621	0.010	32.13	2.3	0.10	3	3	0.27	..1....1	...111..	.1..1..1	1111....

IMPS Albedos and Diameters

ID/1 Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
1004 Belopolskya	9.99	0.0348	0.002	71.60	2.1	0.10	4	9	1.00	1111...1	....111.	1	....
1005 Arago	9.70	0.0697	0.014	57.82	4.9	0.63	10	28	1.00	.111...1	....111.	..1....1	....
1006 Lagrangea	11.20	0.0670	0.012	29.56	2.3	0.10	3	3	0.33	.111...1	.....1..	.1.....1	...1....
1008 La Paz	10.40	0.0819	0.013	38.64	2.7	0.51	4	12	1.00	.111...1	....111.	1	....
1010 Marlene	10.40	0.0647	0.003	43.47	1.1	0.10	4	11	1.00	.1.1...1	....111.	1	....
1012 Sarema	12.41	0.0430	0.006	21.12	1.3	0.10	2	5	0.67	.1.1...1	....111.	.1.....1	....
1013 Tombecka	10.12	0.1552	0.016	31.93	1.5	0.10	7	11	0.78	.111...1	....111.	.11....1	....
1015 Christa	9.03	0.0459	0.004	96.94	3.6	0.38	9	27	1.00	.1.1...1	....111.	1	..11....
1017 Jacqueline	10.90	0.0544	0.011	37.65	3.4	1.00	4	11	1.00	.1.1...1	....111.	1	....
1018 Arnolda	10.62	0.3701	0.079	16.42	1.5	0.22	2	3	1.00	.111...1	.....11.	.1.....1	....
1019 Strackea	12.63	0.2236	0.040	8.37	0.7	0.10	2	3	0.33	.11....1	....11..	.1.....1	....
1021 Flammario	8.98	0.0458	0.002	99.39	2.3	0.10	4	11	1.00	.1.1...1	....111.	....	....
1022 Olympiada	10.50	0.1600	0.030	26.39	2.2	0.10	1	2	0.50	.1.1...1	....11..	.1.....1	....
1023 Thomana	9.76	0.0649	0.004	58.27	1.6	0.12	4	11	1.00	.1.1...1	....111.	....	..11....
1024 Hale	10.60	0.0594	0.010	41.36	3.1	0.99	5	11	1.00	.111...1	....111.	1	....
1027 Aesculapia	10.60	0.0981	0.009	32.20	1.4	0.10	5	11	0.71	.111...1	....111.	.1.....1	....
1028 Lydina	9.43	0.0586	0.004	71.38	2.2	0.11	12	36	1.00	.1.1...1	....111.	1	...1....
1029 La Plata	10.88	0.1819	0.039	20.78	1.9	0.10	1	2	0.17	.1.....1	...111..	.1.....1	....
1030 Vitja	10.30	0.0326	0.002	64.13	2.0	0.10	4	11	1.00	.1.1...1	....111.	1	..11....
1031 Arctica	9.56	0.0465	0.002	75.47	1.5	0.10	7	21	1.00	.1.1...1	....111.	....	....
1032 Pafuri	10.00	0.0543	0.012	57.04	5.3	0.84	6	18	1.00	.111...1	....111.	..1.1..1	...1....
1033 Simona	11.00	0.1147	0.020	24.76	1.9	0.10	1	2	0.50	.1.....1	.....11.	.1.....1	...1....
1034 Mozartia	12.20	0.3566	0.033	8.08	0.4	0.10	5	9	0.83	.111...1	....11..	.1.....1	....
1035 Amata	10.30	0.0522	0.006	50.70	2.9	0.10	2	5	1.00	.1.1...1	....111.	1	....
1036 Ganymed	9.45	0.2926	0.059	31.66	2.8	0.10	2	2	0.50	.111...1	.....1..	.1.....1	....
1039 Sonneberga	11.10	0.0476	0.004	36.70	1.4	0.10	2	6	1.00	..11..11	....111.	1	....
1041 Asta	9.90	0.0591	0.003	57.27	1.5	0.10	6	17	1.00	.111...1	....111.	....	....
1042 Amazone	9.80	0.0392	0.002	73.64	1.8	0.11	5	14	1.00	.1.1...1	....111.	1	....
1043 Beate	9.79	0.2147	0.019	31.60	1.3	0.12	7	10	0.88	.111...1	....111.	.1.....1	....
1044 Teutonia	10.90	0.3340	0.063	15.20	1.3	0.10	2	2	1.00	.111...1	.....1..	.1.....1	....
1048 Feodosia	9.75	0.0452	0.002	70.16	1.8	0.10	3	9	1.00	.1.1...1	....111.	....1...	....
1049 Gotho	12.00	0.0109	0.002	50.69	3.5	0.10	2	2	1.00	.1.1...1	.....11.	1	....
1051 Merope	9.90	0.0429	0.003	67.21	1.9	0.10	3	8	1.00	.1.1...1	....111.	....	....
1054 Forsytia	10.30	0.0648	0.014	45.47	4.3	0.68	7	20	1.00	.1.1...1	....111.	.11....1	....
1057 Wanda	10.96	0.0446	0.005	40.47	2.1	0.22	8	19	0.89	.111...1	....111.	.1.....1	....
1062 Ljuba	9.85	0.0668	0.005	55.10	2.0	0.10	2	4	1.00	..11..11	....111.	....	....
1063 Aquilegia	11.38	0.1483	0.020	18.28	1.1	0.10	4	4	0.67	.111...1	....11..	.1.....1	....
1064 Aethusa	10.50	0.3202	0.034	18.66	0.9	0.48	3	9	1.00	.1.1...1	....111.	.1.....1	....
1069 Planckia	9.30	0.2158	0.025	39.50	2.1	0.10	2	6	1.00	.1.1...1	....111.	1	....
1070 Tunica	10.60	0.0768	0.014	36.39	3.0	1.00	6	15	1.00	.111...1	....111.	.1.....1	....
1071 Brita	10.10	0.0637	0.004	50.29	1.4	0.10	2	5	1.00	.1.1...1	....111.	....	....
1072 Malva	10.50	0.0549	0.005	45.05	1.8	0.35	10	30	1.00	.1.1...1	....111.	1	...1....
1073 Gellivara	11.90	0.0241	0.005	35.73	3.4	0.10	1	2	0.50	..1....1	....11..	.1.....1	....
1074 Beljawskya	10.00	0.0772	0.007	47.82	2.2	0.10	7	11	0.70	.111...1	....111.	.1..1..1	...1....
1075 Helina	10.15	0.1220	0.011	35.52	1.5	0.10	3	8	1.00	.111...1	....111.	1	....
1076 Viola	12.30	0.0415	0.012	22.63	2.7	0.82	6	9	0.67	.111...1	....11..	.11....1	...1....
1080 Orchis	12.20	0.0430	0.007	23.28	1.7	0.34	8	13	1.00	.111...1	....111.	.11....1	...1....
1081 Reseda	11.30	0.0365	0.003	38.25	1.6	0.20	7	20	1.00	.1.1...1	....111.	....1..1	...1....
1082 Pirola	10.41	0.0655	0.008	43.01	2.4	0.10	2	6	1.00	.1.1...1	....111.	....1..1	....
1084 Tamariwa	10.78	0.1165	0.018	27.19	1.9	0.10	3	5	0.75	.1.1...1	....111.	.11....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1085	Amaryllis	9.40	0.0628	0.003	69.95	1.4	0.10	7	20	1.00	.1.1...1	....111.	....	....
1086	Nata	9.30	0.0767	0.011	66.27	4.3	0.66	6	18	1.00	.111...1	....111.	1	....
1087	Arabis	9.73	0.2248	0.040	31.75	2.5	0.10	2	3	0.33	.111...1	.....11.	.1.....1	....
1089	Tama	11.60	0.2435	0.026	12.89	0.6	0.10	4	9	0.80	.111...1	....111.	.1.....1	....
1091	Spiraea	10.60	0.0994	0.012	31.98	1.8	0.10	2	5	1.00	.11....1	....111.	.1..1..1	...1....
1092	Lilium	10.82	0.0390	0.003	46.17	1.5	0.10	4	11	1.00	.111...1	....111.	....1..1	...1....
1093	Freda	8.83	0.0381	0.002	116.73	2.9	0.10	3	8	1.00	.1.1...1	....111.	....	....
1094	Siberia	11.90	0.0943	0.011	18.05	1.0	0.12	5	11	1.00	.111...1	....111.	.1.....1	....
1095	Tulipa	10.42	0.1208	0.014	31.52	1.7	0.10	3	5	0.75	.111...1	....11..	.1.....1	....
1096	Reunerta	10.30	0.0638	0.008	45.83	2.7	0.81	6	17	1.00	.111...1	....111.	....	....
1097	Vicia	11.70	0.0831	0.010	21.08	1.1	0.10	4	6	0.67	.111...1	....111.	.1.....1	....
1098	Hakone	10.20	0.2404	0.022	24.73	1.1	0.10	6	11	0.86	.111...1	....111.	.1.....1	....
1099	Figneria	10.40	0.1415	0.087	29.39	6.3	0.76	3	3	0.33	111....1	.....1..	.11....1	..11....
1101	Clematis	10.10	0.1124	0.009	37.86	1.4	0.10	8	15	0.89	.111...1	....111.	.1.....1	...1....
1102	Pepita	9.40	0.1991	0.023	39.27	2.1	0.10	5	6	0.83	.111...1	.....11.	.1.....1	...1....
1104	Syringa	12.50	0.0362	0.002	22.10	0.7	0.10	7	16	0.88	.111...1	....111.	.1.....1	....
1105	Fragaria	10.09	0.1186	0.029	37.03	3.8	0.70	7	17	1.00	.1.1...1	....111.	.11....1	....
1107	Lictoria	9.10	0.0646	0.005	79.17	2.9	0.36	4	11	1.00	.111...1	....111.	....	....
1108	Demeter	11.91	0.0464	0.008	25.61	2.0	0.46	2	4	1.00	..1...11	....11..	.1..1..1	...1....
1109	Tata	10.06	0.0378	0.002	66.53	1.4	0.10	6	18	1.00	.1.1...1	....111.	1	....
1112	Polonia	10.05	0.1319	0.012	35.76	1.6	0.10	5	13	1.00	.1.1...1	....111.	.1.....1	....
1113	Katja	9.40	0.2071	0.023	38.50	2.0	0.10	2	4	1.00	.111...1	.....11.	.1.....1	....
1114	Lorraine	9.90	0.0501	0.003	62.20	1.7	0.10	3	8	1.00	.111...1	....111.	....	....
1115	Sabauda	9.30	0.0711	0.004	68.82	1.8	0.10	3	9	1.00	.1.1...1	....111.	....	....
1116	Catriona	9.70	0.1522	0.006	39.12	0.7	0.10	6	18	1.00	.111...1	....111.	1	....
1118	Hanskya	9.50	0.0470	0.002	77.20	1.7	0.10	9	26	1.00	.111...1	....111.	....1..1	...1....
1119	Euboea	11.20	0.0590	0.023	31.49	4.8	0.96	2	5	1.00	.111...1	....111.	.11....1	....
1122	Neith	12.00	0.2093	0.020	11.57	0.5	0.27	2	5	0.67	.1.1...1	....111.	.1.....1	...1....
1124	Stroobantia	10.67	0.1569	0.015	24.65	1.1	0.10	4	9	1.00	.111.1.1	....111.	.1.....1	....
1126	Otero	12.10	0.1786	0.033	11.96	1.0	0.10	1	2	0.33	.1.....1	....11..	.1.....1	....
1127	Mimi	10.95	0.0336	0.008	46.84	4.9	1.00	9	26	1.00	.111...1	....111.	..1.....	....
1128	Astrid	10.70	0.0770	0.010	34.69	2.1	0.22	2	5	1.00	.111...1	....111.	1	....
1129	Neujmina	10.20	0.1216	0.010	34.76	1.4	0.10	2	6	1.00	.1.....1	....111.	1	....
1135	Colchis	10.20	0.0573	0.004	50.64	1.5	0.15	6	17	1.00	.111...1	....111.	1	....
1136	Mercedes	11.00	0.1100	0.021	25.28	2.1	0.47	2	5	1.00	.111...1	....111.	.1.....1	....
1137	Raissa	10.74	0.1592	0.015	23.69	1.1	0.10	3	5	1.00	.111...1	....11..	.1.....1	....
1140	Crimea	10.28	0.1772	0.014	27.75	1.1	0.10	5	13	1.00	.111...1	....111.	.1.....1	....
1143	Odysseus	7.93	0.0753	0.005	125.64	3.7	0.10	5	11	1.00	.111...1	....111.	1	....
1144	Oda	10.00	0.0533	0.004	57.59	2.2	0.10	9	23	1.00	..11..11	....111.	.11....1	..11....
1145	Robelmonte	11.10	0.1186	0.009	23.25	0.8	0.10	4	12	0.67	.1.1...1	....111.	1	....
1146	Biarmia	9.80	0.2190	0.018	31.14	1.2	0.10	4	11	1.00	.111...1	....111.	1	....
1148	Rarahu	10.15	0.1393	0.028	33.23	2.9	0.10	2	3	1.00	1.11...1	.....11.	.11.1..1	...1....
1149	Volga	10.57	0.0338	0.002	55.57	1.8	0.52	8	22	1.00	.111...1	....111.	....	...1....
1152	Pawona	11.30	0.2167	0.030	15.69	1.0	0.10	2	4	0.67	.1.1...1	....11..	.1.....1	....
1154	Astronomia	10.51	0.0296	0.002	61.08	1.8	0.10	6	17	1.00	.1.1...1	....111.	1	....
1155	Aenna	11.50	0.3278	0.066	11.64	1.0	0.10	2	2	0.29	.111...1	...1.1..	.1.....1	....
1158	Luda	10.80	0.2329	0.022	19.06	0.8	0.86	3	8	1.00	.111...1	....111.	....1..1	....
1159	Granada	11.55	0.0472	0.003	29.98	0.9	0.10	6	16	1.00	.1.1...1	....111.	1	....
1161	Thessalia	11.60	0.0439	0.008	30.37	2.5	0.10	2	3	0.40	.11....1	.....11.	.1.....1	....
1163	Saga	10.60	0.1200	0.015	29.11	1.7	0.10	6	9	0.86	.111...1	.....11.	.11....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1165	Imprinetta	10.30	0.0562	0.005	48.82	1.9	0.10	10	22	1.00	1111...1	....111.	.11....1	...1....
1166	Sakuntala	11.30	0.0875	0.012	24.69	1.6	0.69	3	8	1.00	.11....1	....111.	1	....
1167	Dubiago	9.85	0.0509	0.010	63.12	5.6	0.86	6	17	1.00	.111...1	....111.	1	...1....
1168	Brandia	12.53	0.1526	0.021	10.61	0.7	0.10	3	3	0.60	.11....1	.....1..	.1.....1	....
1170	Siva	12.43	0.1751	0.032	10.37	0.8	0.10	2	2	0.40	.11....1	.....1..	.1.....1	....
1171	Rusthawelia	9.90	0.0394	0.003	70.13	2.3	0.10	4	11	1.00	.1.1...1	....111.	1	....
1172	Aneas	8.33	0.0403	0.003	142.82	4.8	0.10	4	11	1.00	.111...1	....111.	1	....
1173	Anchises	8.89	0.0308	0.006	126.27	10.7	0.61	3	8	0.75	.1.1...1	....111.	.1.....1	....
1176	Lucidor	10.90	0.0821	0.005	30.65	0.8	0.11	7	21	1.00	.1.1...1	....111.	1	....
1177	Gonnessia	9.30	0.0398	0.010	91.98	9.9	1.00	5	14	1.00	.111...1	....111.	..1.1..1	1111....
1178	Irmela	11.81	0.0916	0.008	19.09	0.8	0.10	8	15	1.00	.111...1	....111.	.1.....1	...1....
1182	Ilona	11.30	0.2624	0.030	14.26	0.8	0.42	4	8	0.57	.111...1	....111.	.1.....1	....
1183	Jutta	12.10	0.0798	0.011	17.89	1.2	0.70	5	8	1.00	.111...1	....111.	.1.....1	....
1186	Turnera	9.20	0.2919	0.036	35.56	2.0	0.23	2	6	1.00	.1.1...1	....111.	....1..1	....
1187	Afra	11.30	0.0527	0.016	31.83	3.9	0.97	4	9	0.67	.111...1	....111.	.11....1	....
1188	Gothlandia	11.70	0.2401	0.025	12.40	0.6	0.10	5	8	0.56	.1.1...1	....111.	.1.....1	...1....
1189	Terentia	10.00	0.0566	0.007	55.88	3.2	0.10	1	3	1.00	.1.1...1	....111.	1	....
1190	Pelagia	12.40	0.0636	0.008	17.45	1.0	0.10	2	5	0.67	.1.1...1	....111.	.1.....1	....
1191	Alfaterna	11.30	0.0303	0.005	41.93	2.9	1.00	6	17	1.00	.111...1	....111.	1	...1....
1194	Aletta	10.20	0.0479	0.003	55.39	1.4	0.10	3	8	1.00	.1.1...1	....111.	....	....
1196	Sheba	10.26	0.1621	0.014	29.29	1.2	0.10	10	18	0.83	.111...1	....111.	.1.....1	...1....
1197	Rhodesia	10.17	0.0672	0.011	47.42	3.4	1.00	6	18	1.00	.1.1...1	....111.	1	....
1199	Geldonia	10.36	0.1299	0.029	31.25	3.0	0.82	6	16	1.00	.111...1	....111.	.11....1	...1....
1200	Imperatrix	10.50	0.0714	0.017	39.52	3.9	1.00	10	29	0.91	.1.1...1	....111.	..1....1	....
1201	Strenua	11.40	0.0401	0.009	34.86	3.5	0.75	9	27	0.90	.1.1...1	....111.	..1....1	...1....
1202	Marina	10.60	0.0337	0.003	54.93	2.6	0.10	7	12	0.88	.111...1	.....11.	.1.....1	....
1203	Nanna	11.20	0.0473	0.012	35.18	3.9	0.10	1	2	0.14	.1.1...1	...111..	.1.....1	....
1207	Ostenia	11.00	0.1338	0.016	22.93	1.3	0.10	4	6	1.00	.111...1	....111.	.1.....1	....
1208	Troilus	8.99	0.0419	0.003	103.34	3.9	0.10	4	10	1.00	.111...1	....111.	.1.....1	....
1210	Morosovia	9.91	0.1695	0.032	33.65	2.8	0.89	7	19	1.00	.111...1	....111.	.11....1	....
1211	Bressole	10.60	0.0695	0.011	38.24	2.7	0.10	2	5	1.00	.111...1	....111.	.11....1	....
1212	Francette	9.54	0.0400	0.003	82.13	3.2	0.10	5	15	1.00	.1.1...1	....111.	1	....
1213	Algeria	10.80	0.0767	0.027	33.20	4.7	0.58	2	3	0.67	.111...1	.....11.	.11....1	....
1214	Richilde	10.90	0.0619	0.013	35.29	3.2	1.00	8	23	0.89	.1.1...1	....111.	1	....
1219	Britta	11.94	0.2267	0.040	11.43	0.9	0.10	2	3	0.50	.111...1	....11..	.1.....1	....
1222	Tina	11.20	0.1426	0.028	20.25	1.8	0.47	10	27	1.00	.111...1	....111.	.11....1	.....1..
1224	Fantasia	11.36	0.2599	0.019	13.94	0.5	0.10	6	15	1.00	.1.1...1	....111.	.1.....1	....
1226	Golia	11.10	0.2388	0.052	16.39	1.5	0.19	2	3	0.33	.1.....1	....11..	.1.....1	...1....
1227	Geranium	10.10	0.0921	0.008	41.82	1.8	0.79	3	7	0.50	.111...1	....111.	1	...1....
1229	Tilia	11.10	0.0839	0.008	27.65	1.2	0.10	3	8	1.00	.1.1...1	....111.	.1.....1	....
1231	Auricula	11.60	0.0798	0.014	22.52	1.8	0.10	1	2	0.25	.1.....1	...1.11.	.1.....1	....
1232	Cortusa	10.20	0.1339	0.021	33.13	2.3	0.10	2	3	1.00	.111...1	.....11.	.1..1..1	....
1233	Kobresia	11.30	0.0475	0.002	33.50	0.8	0.10	9	24	1.00	.111...1	....111.	1	..11....
1234	Elyna	10.71	0.1355	0.040	26.04	3.1	0.87	6	12	1.00	.111...1	....111.	.11....1	....
1236	Thais	11.93	0.0599	0.007	22.34	1.3	0.10	3	7	0.50	.111...1	....111.	.1.....1	...1....
1237	Genevieve	10.91	0.0484	0.003	39.74	1.1	0.10	7	20	1.00	.1.1...1	....111.	1	....
1238	Predappia	11.90	0.0771	0.008	19.96	1.0	0.10	3	6	1.00	.111...1	....111.	.1..1..1	....
1239	Queteleta	12.50	0.0695	0.019	15.94	1.8	0.99	4	11	1.00	.111...1	....111.	.11....1	....
1240	Centenaria	9.70	0.0673	0.004	58.85	1.5	0.10	5	15	1.00	.111...1	....111.	....	....
1241	Dysona	9.45	0.0425	0.005	83.05	4.4	0.88	6	17	1.00	.1.1...1	....111.	....	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											1111111	11122222	22222333
										12345678	90123456	78901234	56789012
1242 Zambesia	10.10	0.0708	0.005	47.70	1.6	0.11	2	6	1.00	.1.1...1	....111.	....	....
1243 Pamela	9.68	0.0483	0.009	70.07	5.9	1.00	6	18	1.00	.1.1...1	....111.	1	....
1244 Deira	11.30	0.0557	0.007	30.95	1.9	0.73	4	11	1.00	.1.1...1	....111.	.1.....1	....
1245 Calvinia	9.89	0.2713	0.086	26.84	3.5	0.58	2	5	1.00	.111...1	....111.	..1.1..1	....
1246 Chaka	10.90	0.2351	0.026	18.11	0.9	0.61	5	12	1.00	.1.1...1	....111.	.1.....1	....
1247 Memoria	10.52	0.0846	0.009	35.97	1.9	0.10	2	5	1.00	.1.1...1	....111.	.1.....1	....
1249 Rutherfordia	11.54	0.2778	0.038	12.41	0.8	0.10	4	6	0.57	.1.....1	....11..	.1.....1	....
1250 Galanthus	12.26	0.0500	0.017	21.00	2.9	0.63	3	3	0.75	.111...1	.....1..	.11....1	....
1252 Celestia	10.89	0.2573	0.053	17.39	1.6	0.10	2	2	0.67	..11...1	.....1..	.1.....1	....
1254 Erfordia	10.80	0.0409	0.012	45.48	5.4	0.95	7	19	1.00	.1.1...1	....111.	..1....1	....
1255 Schilowa	10.20	0.1389	0.015	32.52	1.6	0.48	5	14	1.00	.111...1	....111.	.1.....1	....
1256 Normannia	9.66	0.0504	0.004	69.22	2.8	0.10	4	11	0.80	.111...1	....111.	1	....
1258 Sicilia	10.50	0.0564	0.007	44.47	2.4	0.50	7	18	1.00	.111...1	....111.	1	....
1259 Ogyalla	11.00	0.0641	0.007	33.13	1.6	0.26	6	17	0.75	.1.1...1	....111.	1	....
1261 Legia	11.00	0.0719	0.006	31.28	1.3	0.10	4	11	1.00	.1.1...1	....111.	1	....
1262 Sniadeckia	10.25	0.0529	0.016	51.49	6.2	0.99	3	9	1.00	.111...1	....111.	..1.1..1	....
1263 Varsavia	10.50	0.0459	0.002	49.29	1.1	0.10	4	11	1.00	.1.1...1	....111.	1	....
1264 Letaba	9.10	0.0725	0.004	74.74	2.1	0.85	7	19	1.00	.111...1	....111.	....	....
1266 Tone	9.41	0.0566	0.006	73.34	3.8	0.55	6	18	1.00	.1.1...1	....111.	1	....
1267 Geertruida	12.10	0.0466	0.006	23.41	1.4	0.10	3	4	0.60	.111...1	.....11.	.1..1..1	....
1268 Libya	9.12	0.0449	0.002	94.10	2.3	0.10	4	12	1.00	.1.1...1	....111.	....	....
1269 Rollandia	8.82	0.0473	0.003	105.19	2.8	0.10	6	18	1.00	.1.1...1	....111.	....1..1	...1....
1271 Isergina	10.60	0.0517	0.008	44.33	3.1	0.37	5	14	1.00	.1.1...1	....111.	..1....1	....
1275 Cimbria	10.72	0.1109	0.044	28.65	4.4	0.99	3	6	0.43	.1.1...1	....111.	.11....1	....
1276 Ucclia	10.40	0.1303	0.019	30.63	2.1	0.26	3	8	1.00	.111...1	....111.	.1.....1	....
1277 Dolores	11.05	0.0879	0.016	27.64	2.2	0.63	8	22	1.00	.111...1	....111.	.1.....1	...1....
1280 Baillauda	10.33	0.0505	0.004	50.83	2.0	0.10	6	18	1.00	.1.1...1	....111.	1	....
1281 Jeanne	11.60	0.0864	0.016	21.65	1.7	0.10	2	2	1.00	..11..11	.....1..	.1..1..1	....
1282 Utopia	10.00	0.0627	0.010	53.07	3.7	0.87	6	18	1.00	.1.1...1	....111.	1	....
1283 Komsomolia	10.30	0.1856	0.017	26.87	1.1	0.10	7	20	1.00	1111...1	....111.	.11....1	....
1284 Latvia	10.24	0.1045	0.007	36.81	1.2	0.10	6	18	1.00	.1.1...1	....111.	.1.....1	....
1285 Julietta	10.60	0.0610	0.005	40.83	1.4	0.10	8	20	1.00	.111...1	....111.	1	....
1289 Kutaissi	10.73	0.1374	0.021	25.62	1.8	0.10	2	4	1.00	..11..11	....111.	.1.....1	.....1..
1291 Phryne	10.33	0.1818	0.033	26.78	2.2	0.10	2	2	1.00	..11...1	.....1..	.1.....1	....
1293 Sonja	12.00	0.4598	0.095	7.80	0.7	0.10	1	3	0.14	.1.....1	...1111.	.11....1	....
1294 Antwerpia	10.20	0.1220	0.024	34.71	3.0	0.65	5	14	1.00	.1.1...1	....111.	..1....1	....
1295 Deflotte	10.60	0.0441	0.004	48.03	1.8	0.10	2	6	1.00	.1.1...1	....111.	....1..1	...1....
1296 Andree	10.90	0.1209	0.017	25.26	1.6	0.87	8	24	1.00	.111...1	....111.	....1..1	...1....
1298 Nocturna	10.70	0.0578	0.006	40.04	2.0	0.10	2	6	1.00	.1.1...1	....111.	.1.....1	....
1300 Marcelle	10.90	0.0995	0.008	27.84	1.1	0.10	8	23	1.00	.111...1	....111.	.11....1	....
1301 Yvonne	10.80	0.1632	0.040	22.77	2.4	1.00	10	27	1.00	.11....1	....111.	.11....1	....
1303 Luthera	9.00	0.0608	0.003	85.45	2.1	0.10	4	11	1.00	.111...1	....111.	....	....
1304 Arosa	9.10	0.2307	0.023	41.89	1.9	0.10	2	5	0.67	.1.1...1	....111.	1	....
1306 Scythia	9.71	0.0506	0.007	67.52	4.5	0.85	5	14	1.00	.1.1...1	....111.	1	....
1308 Halleria	10.80	0.0454	0.003	43.16	1.4	0.10	4	11	1.00	.1.1...1	....111.	1	....
1309 Hyperborea	10.20	0.0450	0.007	57.15	3.9	0.94	6	18	1.00	.1.1...1	....111.	1	....
1311 Knopfia	12.20	0.1178	0.035	14.06	1.7	0.38	3	3	0.30	..11...1	...1.1..	.11....1	....
1312 Vassar	10.80	0.0643	0.004	36.28	1.1	0.10	2	6	1.00	.1.....1	....111.	1	..11....
1314 Paula	12.68	0.1171	0.021	11.31	0.9	0.10	1	3	0.10	11.....1	...1111.	.1.....1	....
1315 Bronislawa	9.80	0.0527	0.002	63.50	1.3	0.10	5	15	1.00	.1.1...1	....111.	....	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1318	Nerina	11.90	0.1811	0.017	13.02	0.6	0.10	8	18	0.80	.1.1...1	....111.	.1.....1	....
1320	Impala	10.40	0.0775	0.010	39.72	2.3	0.10	2	4	0.67	.1.....1	.....11.	.1.....1	....
1323	Tugela	9.90	0.0567	0.007	58.44	3.4	0.45	2	6	1.00	.1.....1	....111.	....	....
1325	Inanda	11.90	0.2697	0.032	10.67	0.6	0.10	4	6	0.67	.111...1	....11..	.1.....1	...1....
1326	Losaka	10.92	0.1499	0.030	22.47	1.9	0.10	1	2	1.00	..1...11	....1.1.	.1.....1	....
1327	Namaqua	12.10	0.0404	0.010	25.14	2.5	0.10	2	2	0.67	.111...1	.....1..	.1.....1	....
1328	Devota	10.31	0.0407	0.008	57.11	5.1	0.85	6	17	1.00	.1.1...1	....111.	..1....1	...1....
1330	Spiridonia	10.17	0.0490	0.010	55.53	4.9	0.99	11	31	1.00	.111...1	....111.	..1....1	...1....
1331	Solvejg	10.14	0.1509	0.039	32.08	3.4	0.96	6	18	1.00	.1.1...1	....111.	.11....1	....
1332	Marconia	10.20	0.0756	0.014	44.10	3.6	0.62	3	9	1.00	.1.1...1	....111.	.1.....1	....
1334	Lundmarka	10.00	0.1801	0.037	31.32	2.8	0.65	6	13	0.86	.111...1	....111.	.1.....1	....
1336	Zeelandia	10.66	0.2184	0.052	20.99	2.1	0.10	1	2	0.50	.1.....1	.....11.	.1..1..1	....
1337	Gerarda	11.06	0.0441	0.010	38.86	3.6	1.00	11	30	1.00	.111...1	....111.	..1....1	...1....
1339	Desagneauxa	10.81	0.1589	0.026	22.96	1.7	0.10	2	4	0.67	.1.1...1	.....11.	.1.....1	....
1340	Yvette	11.10	0.0958	0.023	25.87	2.6	0.10	2	3	0.50	.111...1	.....11.	.11....1	....
1341	Edmee	10.58	0.1371	0.011	27.49	1.1	0.10	7	17	1.00	.111...1	....111.	.1.....1	....
1342	Brabantia	11.35	0.1573	0.026	18.00	1.3	0.37	10	28	1.00	.11....1	....111.	.11....1	..11....
1343	Nicole	11.10	0.1076	0.021	24.41	2.0	0.10	1	2	0.50	.1.1...1	....11..	.1.....1	....
1345	Potomac	9.73	0.0439	0.004	71.82	3.0	0.10	4	9	0.80	.1.1...1	....111.	.1.....1	....
1347	Patria	11.60	0.0386	0.003	32.40	1.1	0.10	6	16	0.86	.1.1...1	....111.	.1.....1	....
1350	Rosselia	10.78	0.1579	0.025	23.35	1.7	0.10	2	2	1.00	.111...1	....11..	.1.....1	....
1351	Uzbekistania	9.60	0.0606	0.009	64.91	4.3	0.68	5	15	1.00	.1.1...1	....111.	1	....
1353	Maartje	10.40	0.1073	0.030	33.75	3.9	0.95	6	16	1.00	.111...1	....111.	.11....1	....
1354	Botha	11.30	0.0225	0.006	48.75	5.8	0.77	5	8	1.00	.111...1	....111.	.11.1..1	....
1356	Nyanza	9.90	0.0462	0.008	64.73	5.1	0.88	4	12	1.00	.1.1...1	....111.	1	....
1357	Khama	11.03	0.0272	0.003	50.16	2.8	0.36	4	12	0.80	..11...1	....111.	....1..1	...1.1..
1358	Gaika	12.20	0.0585	0.012	19.96	1.7	0.10	2	2	1.00	.1.1...1	.....1..	.1.....1	....
1359	Prieska	10.50	0.0413	0.002	51.98	1.4	0.10	7	20	1.00	.1.1...1	....111.	1	....
1360	Tarka	11.00	0.0790	0.007	29.84	1.3	0.18	4	9	1.00	.111...1	....111.	.1.....1	....
1361	Leuschneria	10.80	0.0924	0.010	30.25	1.5	0.10	5	12	0.71	.111...1	....111.	.1..1..1	....
1362	Griqua	11.18	0.0667	0.007	29.90	1.5	0.10	2	4	1.00	.1.1...1	....111.	1	....
1366	Piccolo	10.45	0.1538	0.022	27.55	1.8	0.10	3	4	0.50	.111...1	....11..	.1.....1	....
1368	Numidia	10.92	0.2035	0.019	19.29	0.9	0.10	5	10	0.71	.111...1	....111.	.1.....1	....
1369	Ostanina	10.00	0.1021	0.024	41.59	4.1	0.92	5	14	1.00	.111...1	....111.	..1....1	....
1372	Haremari	12.20	0.0409	0.007	23.85	1.8	0.10	2	3	0.67	..11..11	....11..	.1.....1	....
1378	Leonce	12.10	0.0773	0.013	18.18	1.4	0.10	2	3	1.00	..11..11	.....11.	.1..1..1	....
1383	Limburgia	11.50	0.0891	0.016	22.32	1.8	0.65	9	23	1.00	.111...1	....111.	.11....1	....
1384	Kniertje	11.20	0.0823	0.010	26.67	1.5	0.96	3	8	1.00	.1.1...1	....111.	1	....
1385	Gelria	10.70	0.1883	0.035	22.19	1.8	0.10	2	2	1.00	.1.1...1	.....11.	.1..1..1	...1....
1388	Aphrodite	10.81	0.1317	0.035	25.22	2.8	0.10	1	2	1.00	.1.1...1	....11..	.11.1..1	...1....
1390	Abastumani	9.40	0.0298	0.001	101.58	2.3	0.10	4	12	1.00	.111...1	....111.	....	....
1392	Pierre	11.72	0.0519	0.007	26.44	1.6	0.10	3	4	0.43	.1.1...1	....111.	.1.....1	....
1396	Outeniqua	12.00	0.2335	0.037	10.95	0.8	0.10	3	3	0.25	.111...1	...1.1..	.1..1..1	...1....
1403	Idelsonia	11.30	0.0503	0.013	32.56	3.5	0.20	2	2	0.67	..11...1	.....1..	.1.....1	....
1404	Ajax	9.20	0.0555	0.005	81.56	3.1	0.10	6	13	1.00	.1.1...1	....111.	.1.....1	....
1405	Sibelius	12.30	0.1432	0.029	12.18	1.1	0.10	2	2	0.22	1.1....1	...1.1..	.1.....1	....
1406	Komppa	10.60	0.1517	0.038	25.89	2.7	0.65	6	9	0.75	.111...1	....111.	.11....1	....
1407	Lindelof	10.60	0.2309	0.040	20.98	1.6	0.39	6	14	1.00	.111...1	....111.	.11....1	...1....
1408	Trusanda	11.00	0.0668	0.008	32.46	1.8	0.10	5	10	0.71	.111...1	....111.	.11....1	...1....
1409	Isko	10.60	0.0805	0.008	35.54	1.7	0.33	6	17	1.00	.1.1...1	....111.	1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1411	Brauna	10.90	0.0794	0.007	31.17	1.2	0.10	14	33	0.93	.111...1	....111.	.11....1	...1....
1413	Roucarie	10.90	0.1677	0.048	21.45	2.5	0.27	2	2	1.00	.1.1...1	.....1..	.1.....1	....
1414	Jerome	12.40	0.0652	0.011	17.24	1.3	0.10	3	4	0.75	.1.1...1	.....11.	.11....1	...1....
1415	Malautra	12.19	0.1123	0.020	14.47	1.2	0.10	2	2	0.29	.111...1	...1.1..	.1..1..1	....
1416	Renauxa	10.40	0.1459	0.031	28.95	2.7	0.10	1	2	0.50	..1...11	....1.1.	1	....
1418	Fayeta	12.09	0.2571	0.050	10.01	0.8	0.10	2	2	0.20	.11....1	...111..	.1.....1	....
1421	Esperanto	10.30	0.0714	0.011	43.31	3.1	0.10	1	2	1.00	..11..11	....11..	1	....
1423	Jose	10.50	0.1632	0.036	26.14	2.5	0.10	2	2	0.40	.11....1	....11..	.1.....1	...1....
1424	Sundmania	9.50	0.0558	0.005	70.81	2.7	0.94	5	13	1.00	.111...1	....111.	....	....
1425	Tuorla	11.30	0.2390	0.040	14.94	1.1	0.10	3	3	0.50	..1...11	.....1..	.1.....1	....
1426	Riviera	10.80	0.3546	0.037	15.44	0.7	0.10	6	12	0.75	.111...1	....111.	.11....1	....
1427	Ruvuma	10.70	0.0657	0.003	37.56	0.7	0.10	11	32	1.00	.111...1	....111.	1	....
1428	Mombasa	10.90	0.0240	0.002	56.63	2.0	0.88	4	10	1.00	.111...1	....111.	1	....
1434	Margot	10.43	0.1353	0.013	29.65	1.4	0.10	4	10	0.67	.111...1	....111.	.1.....1	....
1435	Garlena	12.80	0.0432	0.008	17.61	1.4	0.10	3	3	0.33	111....1	.....1..	.1.....1	....
1436	Salonta	10.30	0.0339	0.002	62.90	1.6	0.10	4	11	1.00	.1.1...1	....111.	1	....
1437	Diomedes	8.30	0.0313	0.002	164.31	4.1	0.10	6	17	1.00	.111...1	....111.	1	....
1439	Vogtia	10.45	0.0509	0.010	47.87	4.0	0.10	2	3	0.67	.111...1	.....11.	.1.....1	....
1441	Bolyai	13.10	0.0467	0.011	14.76	1.4	0.10	1	2	0.11	.1.....1	...111..	.1..1..1	....
1444	Pannonia	10.60	0.1331	0.025	27.63	2.3	0.10	2	2	0.50	.11....1	.....1..	.1.....1	....
1448	Lindbladia	12.60	0.0378	0.006	20.65	1.4	0.10	2	2	0.40	.111...1	.....1..	.1.....1	....
1450	Raimonda	11.90	0.1387	0.019	14.88	0.9	0.10	3	6	1.00	.1.1...1	....111.	.1..1..1	....
1453	Fennia	12.69	0.2809	0.035	7.27	0.4	0.10	3	4	0.60	..11..11	....11..	.1.....1	....
1456	Saldanha	10.93	0.0395	0.002	43.59	0.9	0.10	8	23	1.00	.1.1...1	....111.	1	....
1458	Mineura	11.50	0.1502	0.015	17.19	0.8	0.10	7	15	0.78	.111...1	....111.	.11....1	....
1459	Magnya	10.60	0.1179	0.029	29.36	3.1	0.10	1	2	0.25	.1.....1	...111..	.11....1	...1....
1461	Jean-Jacques	10.01	0.1582	0.015	33.27	1.5	0.10	4	7	1.00	.111...1	....111.	.1.....1	....
1462	Zamenhof	10.80	0.1268	0.019	25.83	1.7	0.10	4	6	0.57	.111...1	....111.	.1.....1	....
1463	Nordenmarkia	10.60	0.0514	0.005	44.48	2.1	0.10	4	8	1.00	.111...1	....111.	.1.....1	....
1466	Mundleria	11.90	0.0664	0.006	21.51	0.9	0.10	7	13	1.00	.111...1	....111.	.1.....1	....
1469	Linzia	9.60	0.0734	0.007	58.99	2.5	0.36	8	23	0.89	.111...1	....111.	1	....
1470	Carla	11.00	0.0515	0.003	36.97	1.1	0.10	8	22	1.00	.111.1.1	....111.	1	....
1471	Tornio	10.70	0.0849	0.012	33.04	2.1	0.86	7	20	1.00	.111...1	....111.	1	....
1473	Ounas	11.80	0.1089	0.009	17.58	0.7	0.10	6	15	0.67	.111...1	....111.	.1.....1	....
1477	Bonsdorffia	11.59	0.0517	0.005	28.10	1.3	0.10	4	8	1.00	.111...1	....111.	.1.....1	....
1481	Tubingia	10.34	0.1168	0.013	33.26	1.7	0.10	2	5	1.00	.1.1...1	....111.	....1..1	...1....
1484	Postrema	10.80	0.0420	0.006	44.90	2.9	0.98	4	12	1.00	.1.....1	....111.	....	....
1487	Boda	10.60	0.1195	0.029	29.16	3.0	0.35	2	4	1.00	.111...1	....111.	.1.....1	....
1489	Attila	11.60	0.0446	0.006	30.13	1.9	0.10	3	5	0.43	.111...1	....111.	.1.....1	...1....
1490	Limpopo	12.00	0.0811	0.014	18.58	1.4	0.52	7	19	0.88	.111...1	....111.	.1..1..1	...1....
1492	Oppolzer	12.80	0.0890	0.026	12.27	1.5	0.10	1	2	0.17	.1.....1	...1.11.	.11....1	....
1493	Sigrid	11.99	0.0476	0.009	24.37	2.1	0.63	4	10	0.67	.111...1	....111.	.1..1..1	....
1495	Helsinki	11.60	0.1200	0.026	18.37	1.7	0.10	2	2	0.50	..1....1	.....1..	.1.....1	....
1501	Baade	12.10	0.2093	0.033	11.05	0.8	0.10	1	2	0.50	.1.....1	....11..	.1..1..1	...1....
1502	Arenda	11.60	0.0367	0.003	33.22	1.2	0.10	4	11	1.00	.1.1...1	....111.	1	....
1503	Kuopio	10.60	0.2995	0.056	18.43	1.5	0.10	3	3	0.50	1111...1	.....1..	.1.....1	....
1504	Lappeenranta	11.88	0.1939	0.042	12.70	1.2	0.10	2	3	0.50	.11....1	.....11.	.1.....1	...1....
1505	Koranna	11.00	0.1580	0.036	21.10	2.1	0.97	11	28	0.85	.111...1	....111.	.11....1	...1....
1509	Esclangona	12.64	0.2327	0.038	8.17	0.6	0.10	1	2	0.09	..11...1	...111..	.1.....1	....
1510	Charlois	11.20	0.1033	0.029	23.80	2.8	0.91	6	11	0.75	.1.1...1	....111.	.11....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1511	Dalera	12.70	0.0614	0.037	15.47	3.2	0.92	3	3	0.38	..11...1	....11..	.11.1..1	1.......
1512	Oulu	9.62	0.0366	0.002	82.72	2.5	0.10	15	38	1.00	.1.1...1	....111.	1	...1....
1516	Henry	12.30	0.0536	0.011	19.92	1.7	0.10	2	3	1.00	.1.1...1	.....11.	.1..1..1	...1....
1517	Beograd	11.10	0.0491	0.005	36.16	1.9	0.39	7	20	1.00	.1.1...1	....111.	1	....
1519	Kajaani	11.40	0.0700	0.007	26.37	1.2	0.10	2	5	1.00	.11....1	....111.	.1..1..1	....
1520	Imatra	10.00	0.0615	0.003	53.61	1.4	0.10	8	22	1.00	.111...1	....111.	1	...1....
1524	Joensuu	10.80	0.0462	0.002	42.79	1.1	0.10	5	14	1.00	.111...1	....111.	1	....
1525	Savonlinna	12.40	0.1306	0.020	12.18	0.9	0.10	3	7	0.60	.111...1	....111.	.11....1	....
1532	Inari	11.50	0.0562	0.008	28.10	1.9	0.10	3	4	0.43	..11...1	....11..	.1.....1	....
1533	Saimaa	10.82	0.1216	0.016	26.13	1.5	0.10	4	5	0.80	.111...1	.....11.	.1.....1	....
1534	Nasi	11.70	0.0754	0.006	22.12	0.9	0.10	2	6	1.00	.111...1	....111.	1	....
1535	Paijanne	10.70	0.1299	0.011	26.72	1.0	0.10	7	19	0.88	.111...1	....111.	.1.....1	....
1537	Transylvania	11.90	0.1619	0.041	13.77	1.5	0.77	6	12	0.86	.111...1	....111.	.11....1	...1....
1540	Kevola	10.80	0.0433	0.004	44.18	1.7	0.70	5	13	1.00	.1.1...1	....111.	1	....
1541	Estonia	11.20	0.1434	0.020	20.20	1.3	0.10	4	4	0.80	.111...1	.....1..	.1.....1	...1....
1542	Schalen	10.30	0.0656	0.005	45.19	1.6	0.10	7	20	0.88	.1.1...1	....111.	1	....
1544	Vinterhansenia	11.70	0.0784	0.012	21.71	1.5	0.10	1	2	1.00	.1.....1	....11..	.1.....1	....
1545	Thernoe	11.80	0.0962	0.013	18.71	1.1	0.10	2	6	1.00	.1.1...1	....111.	.1.....1	....
1548	Palomaa	11.50	0.0634	0.010	26.46	1.9	0.51	3	7	0.75	.111...1	....111.	.1.....1	....
1549	Mikko	11.70	0.3531	0.005	10.22	0.8	0.10	2	3	0.33	.111...1	....11..	.1.....1	...1....
1552	Bessel	11.00	0.2042	0.045	18.56	1.8	0.10	1	2	0.50	.1.1...1	....11..	.1..1..1	....
1556	Wingolfia	10.55	0.1297	0.023	28.65	2.2	0.35	4	7	0.80	.111...1	....111.	.11....1	....
1558	Jarnefelt	10.20	0.0347	0.009	65.09	7.1	0.88	2	6	1.00	.1.1...1	....111.	1	....
1561	Fricke	11.60	0.0597	0.011	26.03	2.2	0.10	2	3	0.50	.11....1	.....11.	.1.....1	....
1562	Gondolatsch	11.80	0.2536	0.048	11.52	1.0	0.10	2	2	0.33	1111...1	.....1..	.1.....1	....
1567	Alikoski	9.47	0.0626	0.004	67.83	2.1	0.10	4	12	1.00	.1.1...1	....111.	1	....
1569	Evita	11.10	0.0558	0.007	33.92	2.0	0.10	2	5	1.00	.111...1	....111.	....1..1	...1....
1572	Posnania	10.00	0.1563	0.026	33.62	2.5	0.10	1	2	0.50	...1..11	.....11.	.1.....1	....
1573	Vaisala	12.30	0.2226	0.043	9.77	0.8	0.10	2	2	0.33	111....1	.....1..	.1.....1	....
1574	Meyer	10.30	0.0389	0.003	58.68	2.0	0.10	9	23	1.00	.111...1	....111.	.1.....1	...1....
1576	Fabiola	11.04	0.0913	0.013	27.25	1.7	0.10	2	3	0.50	.111...1	.....11.	.1.....1	....
1578	Kirkwood	10.26	0.0507	0.004	52.39	1.8	0.10	5	15	1.00	.1.1...1	....111.	1	....
1579	Herrick	10.68	0.0517	0.011	42.73	4.0	0.76	6	14	0.75	.111...1	....111.	.11....1	....
1581	Abanderada	10.85	0.0523	0.005	39.28	1.8	0.40	4	10	1.00	.111...1	....111.	1	....
1582	Martir	10.90	0.0570	0.009	36.79	2.6	0.79	5	15	1.00	.111...1	....111.	1	....
1583	Antilochus	8.60	0.0621	0.004	101.60	3.2	0.10	8	17	1.00	.111...1	....111.	....1..1	...1....
1584	Fuji	10.67	0.2025	0.024	21.70	1.2	0.10	3	5	0.60	.1.1...1	....111.	.1.....1	....
1585	Union	10.66	0.0378	0.003	50.42	1.6	0.10	2	6	1.00	.1.1...1	....111.	....	....
1590	Tsiolkovskaja	11.70	0.2095	0.018	13.27	0.5	0.10	6	14	0.67	.111...1	....111.	.1.....1	....
1592	Mathieu	11.60	0.2232	0.024	13.47	0.7	0.10	4	8	0.40	.1.1...1	....11..	.1.....1	....
1594	Danjon	12.20	0.1743	0.017	11.56	0.5	0.10	5	10	0.71	.111...1	....111.	.1.....1	....
1595	Tanga	12.02	0.0557	0.009	22.21	1.6	0.10	2	4	1.00	11.1...1	....111.	.1..1..1	..11....
1596	Itzigsohn	10.40	0.0496	0.002	49.64	1.1	0.10	10	27	1.00	.111...1	....111.	1	....
1598	Paloque	12.20	0.1299	0.022	13.39	1.0	0.10	2	3	0.20	111....1	...111..	.1..1..1	....
1599	Giomus	11.00	0.0450	0.005	39.54	1.8	0.10	4	11	1.00	.111...1	....111.	1	....
1603	Neva	10.90	0.0594	0.016	36.03	4.1	0.94	5	13	1.00	.111...1	....111.	.11....1	....
1604	Tombaugh	10.53	0.1038	0.016	32.33	2.2	0.10	2	3	0.50	.111...1	....11..	.1.....1	....
1605	Milankovitch	10.10	0.1529	0.015	32.47	1.5	0.23	3	6	0.75	.111...1	....111.	.1.....1	....
1607	Mavis	11.60	0.2826	0.052	11.97	1.0	0.10	2	2	1.00	.111...1	.....1..	.1..1..1	....
1609	Brenda	10.61	0.1147	0.014	29.64	1.7	0.10	4	6	1.00	.111...1	....11.	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
1613	Smiley	11.40	0.1085	0.008	21.18	0.7	0.10	3	8	1.00	.111...1	....111.	1	....
1614	Goldschmidt	10.70	0.0432	0.003	46.32	1.4	0.10	4	12	1.00	.111...1	....111.	1	....
1615	Bardwell	11.38	0.0642	0.008	27.78	1.6	0.10	5	5	0.83	.111...1	.....1..	.1.....1	....
1616	Filipoff	11.50	0.0751	0.011	24.31	1.7	0.10	2	3	1.00	.1.1...1	....11..	.1.....1	....
1618	Dawn	11.50	0.1157	0.024	19.59	1.7	0.10	2	2	0.33	..1....1	.....1..	.1.....1	....
1620	Geographos	15.60	0.3258	0.051	1.77	0.1	0.10	1	2	0.13	1.....11	...1.11.	....	....
1621	Druzhba	11.63	0.4388	0.079	9.47	0.8	0.10	1	2	0.50	.1.....1	....11..	.1..1..1	....
1628	Strobel	10.02	0.0532	0.003	57.12	1.7	0.18	4	12	1.00	.1.1...1	....111.	1	....
1629	Pecker	12.60	0.1847	0.040	9.34	0.9	0.10	1	2	0.17	.1.....1	...111..	.1.....1	....
1630	Milet	11.20	0.1459	0.021	20.03	1.3	0.10	4	5	0.36	.111...1	....11..	.1.....1	...1....
1631	Kopff	12.20	0.2497	0.074	9.66	1.2	0.10	1	2	0.50	.1.....1	.....11.	.11....1	....
1632	Siebohme	11.30	0.0748	0.013	26.70	2.0	0.10	1	2	0.50	.1.1...1	.....11.	.1.....1	....
1633	Chimay	10.50	0.0854	0.017	36.12	3.1	0.10	1	3	1.00	.1.1...1	....111.	1	....
1636	Porter	13.10	0.1197	0.027	9.22	0.9	0.10	2	2	0.25	..11...1	...1.1..	.1.....1	...1....
1637	Swings	10.10	0.0780	0.007	45.46	1.9	0.10	3	8	0.50	.1.1...1	....111.	1	...1....
1639	Bower	10.98	0.0541	0.013	36.41	3.7	0.39	3	7	0.50	.111...1	....111.	..1.1..1	...1....
1641	Tana	10.53	0.1596	0.031	26.07	2.2	0.44	6	14	1.00	.1.1...1	....111.	.11....1	....
1645	Waterfield	10.70	0.0991	0.014	30.58	2.0	0.10	2	5	1.00	1.11..11	....111.	.1.....1	....
1650	Heckmann	11.56	0.0497	0.005	29.07	1.4	0.10	2	6	1.00	.1.1...1	....111.	.1.....1	....
1654	Bojeva	10.80	0.1162	0.018	26.98	1.9	0.10	1	3	0.50	.1.1...1	....111.	.1.....1	....
1655	Comas Sola	11.04	0.0726	0.011	30.57	2.1	0.10	3	3	0.43	..11..11	....11..	.1..1..1	...1....
1656	Suomi	12.40	0.2971	0.058	8.08	0.7	0.10	2	3	0.25	.1.....1	...1111.	.1.....1	....
1659	Punkaharju	10.10	0.1654	0.035	31.21	2.9	0.33	2	4	0.67	.111...1	....111.	.11....1	....
1663	van den Bos	12.20	0.1584	0.024	12.13	0.8	0.10	2	3	0.18	.111...1	...111..	.1.....1	....
1669	Dagmar	10.97	0.0565	0.008	35.78	2.4	0.79	6	17	0.86	.111...1	....111.	.1.....1	...1....
1674	Groeneveld	11.06	0.0888	0.013	27.38	1.8	0.10	3	3	0.75	.111...1	....11..	.1.....1	....
1675	Simonida	11.90	0.2501	0.025	11.08	0.5	0.10	4	8	0.67	.111...1	....111.	.1.....1	....
1678	Hveen	10.90	0.0486	0.005	39.86	1.9	0.10	5	10	0.83	.111...1	....111.	.1.....1	....
1679	Nevanlinna	10.60	0.0388	0.006	51.16	3.5	0.10	2	6	1.00	..11..11	....111.	..1.1..1	....
1680	Per Brahe	11.20	0.2953	0.035	14.08	0.8	0.10	3	5	0.43	.111...1	....11..	.1.....1	...1....
1684	Iguassu	10.80	0.1202	0.011	26.53	1.2	0.10	4	7	0.44	.111...1	....11..	.1..1..1	1111....
1687	Glarona	10.25	0.1219	0.044	33.93	4.9	1.00	2	6	1.00	.111...1	....111.	..1....1	....
1690	Mayrhofer	10.90	0.0767	0.011	31.71	2.0	0.10	4	6	0.44	.111...1	....111.	.1.....1	....
1692	Subbotina	11.10	0.0479	0.005	36.59	1.7	0.94	4	11	1.00	.1.1...1	....111.	1	....
1693	Hertzsprung	10.97	0.0484	0.004	38.67	1.5	0.10	2	5	1.00	.111...1	....111.	1	...1....
1695	Walbeck	12.40	0.0504	0.005	19.62	0.8	0.10	2	4	1.00	.11....1	....111.	1	...1....
1698	Christophe	11.20	0.0938	0.024	24.98	2.7	0.39	2	3	1.00	..11..11	....11..	.1.....1	....
1700	Zvezdara	12.47	0.0425	0.005	20.68	1.2	0.10	5	10	0.83	.111...1	....111.	.11....1	...1....
1702	Kalahari	11.03	0.0640	0.006	32.70	1.5	0.10	2	6	1.00	.111...1	....111.	....1..1	...1....
1703	Barry	12.40	0.2187	0.026	9.41	0.5	0.10	4	6	0.50	.111...1	....11..	.1.....1	....
1705	Tapio	12.80	0.1175	0.012	10.68	0.5	0.10	5	10	0.71	.111...1	....111.	.1.....1	....
1708	Polit	11.80	0.0392	0.005	29.30	1.7	0.10	3	7	0.60	.111...1	....111.	.1.....1	....
1712	Angola	9.80	0.0600	0.005	59.48	2.3	1.00	2	5	1.00	.1.1...1	....111.	....1..1	....
1715	Salli	12.10	0.0479	0.004	23.10	0.9	0.22	10	29	1.00	.111...1	....111.	1	...1....
1716	Peter	11.40	0.0661	0.011	27.12	2.0	0.38	8	15	1.00	.111...1	....111.	.11.1..1	..11....
1719	Jens	11.30	0.1489	0.015	18.93	0.9	0.10	2	6	1.00	.111...1	....111.	.1..1..1	....
1721	Wells	10.80	0.0528	0.004	40.03	1.5	0.10	4	12	1.00	.111...1	....111.	1	....
1723	Klemola	10.06	0.1707	0.022	31.30	1.8	0.10	5	12	1.00	.111...1	....111.	.11....1	....
1724	Vladimir	11.30	0.0441	0.003	34.79	1.2	0.10	6	15	1.00	.111...1	....111.	1	....
1726	Hoffmeister	12.10	0.0370	0.004	26.27	1.3	0.10	3	5	0.50	.111...1	....111.	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 78901234	22222333 56789012
1731	Smuts	10.00	0.0604	0.003	54.07	1.1	0.10	5	14	0.83	.1.1...1	....111.	....	....
1732	Heike	11.10	0.1108	0.052	24.06	4.2	0.66	2	2	1.00	.111...1	.....1..	.11....1	....
1734	Zhongolovich	11.70	0.0456	0.004	28.47	1.1	0.10	6	16	1.00	.111...1	....111.	1	...1....
1735	ITA	9.40	0.0790	0.007	62.34	2.4	0.10	3	9	1.00	.1.1...1	....111.	1	....
1742	Schaifers	11.82	0.0838	0.015	19.86	1.6	0.10	2	3	0.50	..11...1	....11..	.1.....1	....
1743	Schmidt	12.48	0.0619	0.013	17.05	1.6	0.10	2	4	0.67	.1.1...1	....111.	.11....1	....
1746	Brouwer	9.95	0.0448	0.008	64.25	4.9	0.10	1	2	0.33	..11..11	.....11.	.1.....1	....
1747	Wright	13.35	0.2005	0.043	6.35	0.6	0.10	2	2	0.25	11.....1	...1.1..	.1.....1	....
1749	Telamon	9.20	0.0562	0.011	81.06	7.0	0.10	2	2	0.33	..11...1	.....1..	.1.....1	....
1754	Cunningham	9.77	0.0345	0.002	79.52	1.7	0.10	8	23	1.00	.111...1	....111.	1	....
1755	Lorbach	10.77	0.1117	0.013	27.90	1.5	0.10	4	5	0.40	.111...1	.....11.	.1.....1	....
1760	Sandra	11.50	0.0345	0.008	35.89	3.5	0.77	5	14	1.00	.111...1	....111.	.11....1	....
1764	Cogshall	11.20	0.0852	0.015	26.21	2.0	0.53	5	11	0.83	.111...1	....111.	.11....1	....
1765	Wrubel	9.92	0.1061	0.028	42.33	4.7	0.93	8	21	1.00	.111...1	....111.	..1....1	..11....
1768	Appenzella	12.70	0.0338	0.009	20.86	2.3	0.10	2	2	0.33	..11...1	.....1..	.1.....1	...1....
1771	Makover	10.10	0.0501	0.002	56.72	1.2	0.10	5	15	0.83	.1.1...1	....111.	....	...1....
1776	Kuiper	11.00	0.0544	0.005	35.96	1.6	0.10	3	9	1.00	.1.1...1	....111.	1	....
1780	Kippes	10.68	0.1212	0.017	27.92	1.8	0.23	8	17	0.89	.1.1...1	....111.	.11....1	....
1783	Albitskij	11.80	0.0738	0.019	21.36	2.4	0.31	2	3	0.33	.111...1	....11..	.1.....1	....
1784	Benguella	12.30	0.0763	0.014	16.68	1.3	0.10	2	2	0.33	.111...1	.....1..	.1.....1	....
1791	Patsayev	11.80	0.0509	0.007	25.71	1.6	0.10	4	4	0.67	.111...1	.....1..	.1..1..1	...1....
1794	Finsen	11.08	0.0469	0.006	37.31	2.3	0.10	2	5	0.67	.1.1...1	....111.	.1.....1	....
1795	Woltjer	11.80	0.0459	0.004	27.09	1.1	0.10	3	8	1.00	.1.1...1	....111.	1	....
1796	Riga	9.84	0.0376	0.002	73.83	1.8	0.10	4	12	1.00	.111...1	....111.	....1...	....
1799	Koussevitzky	10.90	0.1426	0.034	23.26	2.4	0.10	1	2	0.50	.1.....1	.....11.	.1.....1	....
1801	Titicaca	11.00	0.1309	0.032	23.18	2.4	0.10	1	2	0.17	..1....1	...1.11.	.1.....1	....
1805	Dirikis	11.00	0.1065	0.026	25.70	2.7	0.10	1	2	0.25	.1.....1	...1.11.	.1.....1	....
1808	Bellerophon	12.10	0.1076	0.011	15.41	0.7	0.10	5	6	0.71	.111...1	.....11.	.1.....1	....
1812	Gilgamesh	11.30	0.1450	0.027	19.18	1.6	0.10	2	2	0.29	..11...1	...1.1..	.1.....1	....
1813	Imhotep	11.60	0.0662	0.009	24.73	1.6	0.10	1	3	1.00	.1.1...1	....111.	.1.....1	....
1815	Beethoven	11.36	0.0548	0.009	30.36	2.2	0.10	3	5	0.60	.111...1	....111.	.11....1	....
1817	Katanga	11.80	0.1331	0.018	15.90	1.0	0.40	7	14	1.00	.111...1	....111.	.11....1	....
1819	Laputa	10.20	0.0614	0.017	48.92	5.6	0.76	2	4	1.00	.111...1	....111.	.1.....1	...1....
1826	Miller	10.90	0.1294	0.022	24.41	1.9	0.10	2	4	0.50	.1.1...1	....11..	.1.....1	....
1828	Kashirina	10.90	0.0995	0.009	27.85	1.1	0.10	2	5	1.00	.11....1	....111.	1	....
1832	Mrkos	11.00	0.0742	0.013	30.78	2.4	0.10	2	4	0.67	.1.1...1	....111.	.1.....1	....
1838	Ursa	10.60	0.0836	0.008	34.87	1.6	0.10	2	4	1.00	.1.1...1	....111.	.1..1..1	....
1841	Masaryk	10.80	0.0514	0.010	40.57	3.4	0.13	3	4	1.00	.111...1	.....11.	.11....1	....
1843	Jarmila	11.60	0.0611	0.004	25.74	0.8	0.10	8	24	1.00	.111...1	....111.	.1.....1	....
1846	Bengt	13.10	0.0781	0.014	11.41	0.9	0.10	3	3	0.75	1111...1	.....1..	.1.....1	....
1847	Stobbe	11.00	0.1231	0.019	23.90	1.7	0.10	2	3	0.67	1.11...1	....111.	.1..1..1	....
1851	Lacroute	12.30	0.0745	0.009	16.89	0.9	0.10	3	6	0.60	.1.1...1	....111.	.1.....1	....
1852	Carpenter	11.10	0.1224	0.024	22.89	1.9	0.10	2	2	0.50	..1....1	.....1..	.1.....1	....
1853	McElroy	10.50	0.2494	0.026	21.14	1.0	0.10	5	7	1.00	.1.1...1	.....11.	.1.....1	....
1859	Kovalevskaya	10.20	0.0694	0.005	46.02	1.6	0.10	6	14	1.00	.1.1...1	....111.	1	....
1867	Deiphobus	8.61	0.0422	0.003	122.67	3.9	0.10	3	7	1.00	.1.1...1	....111.	1	....
1873	Agenor	10.50	0.0386	0.007	53.76	4.4	0.10	3	3	0.75	.111...1	.....11.	.1.....1	....
1880	McCrosky	12.10	0.1025	0.022	15.78	1.5	0.10	2	2	0.15	..1....1	...1.1..	.1.....1	...1....
1884	Skip	11.70	0.2934	0.037	11.22	0.6	0.10	3	5	0.43	.11....1	....111.	.1.....1	....
1889	Pakhmutova	10.80	0.0752	0.009	33.53	1.8	0.10	1	3	1.00	.1.....1	....111.	....1..1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
1890 Konoshenkova	10.80	0.1283	0.014	25.68	1.3	0.10	5	11	0.83	.111...1	....111.	.1.....1	....
1895 Larink	11.80	0.1099	0.025	17.51	1.7	0.10	1	2	0.33	.1.....1	....11..	.1.....1	....
1901 Moravia	11.20	0.0801	0.032	27.03	4.2	0.46	2	2	0.33	..11..11	.....1..	.11....1	....
1902 Shaposhnikov	9.51	0.0296	0.002	96.86	3.2	0.10	2	6	1.00	.1.1...1	....111.	....1..1	....
1904 Massevitch	11.30	0.1613	0.038	18.19	1.8	0.10	1	2	0.33	.1.....1	....11..	.1..1..1	....
1908 Pobeda	11.70	0.0779	0.015	21.77	1.8	0.10	2	2	1.00	.1.1...1	.....1..	.1.....1	....
1909 Alekhin	12.30	0.0700	0.014	17.42	1.5	0.85	7	15	1.00	.111...1	....111.	.1.....1	....
1911 Schubart	10.11	0.0249	0.001	80.10	2.0	0.10	4	11	1.00	.1.1...1	....111.	....	....
1923 Osiris	13.10	0.0591	0.008	13.11	0.8	0.10	3	5	0.60	.111...1	....11..	.1.....1	....
1924 Horus	12.80	0.0888	0.011	12.28	0.7	0.10	3	6	0.75	.1.1...1	....11..	.1..1..1	....
1930 Lucifer	10.90	0.1058	0.030	27.00	3.2	0.99	6	15	1.00	1111...1	....111.	.11....1	....
1934 Jeffers	12.80	0.3274	0.046	6.40	0.4	0.35	6	12	0.46	.1.1...1	....111.	.11....1	...1....
1936 Lugano	11.10	0.1042	0.008	24.81	0.8	0.10	5	12	1.00	.1.1...1	....111.	1	...1....
1937 Locarno	11.90	0.1786	0.042	13.11	1.3	0.53	4	6	0.33	.111...1	....111.	.1.....1	....
1939 Loretta	10.80	0.0942	0.012	29.96	1.7	0.10	3	6	0.75	.1.1...1	.....11.	.1.....1	....
1940 Whipple	11.00	0.0613	0.005	33.87	1.3	0.10	10	23	1.00	.111...1	....111.	.11....1	...1....
1942 Jablunka	13.00	0.0567	0.007	14.02	0.8	0.10	1	2	0.50	.1.....1	....11..	.1.....1	....
1947 Iso-Heikkila	10.80	0.0976	0.012	29.44	1.7	0.10	2	4	1.00	.111...1	....11..	.1.....1	....
1951 Lick	14.70	0.0756	0.017	5.55	0.5	0.10	2	3	0.29	.11...11	...111..	.11....1	...1....
1952 Hesburgh	10.32	0.1041	0.009	35.55	1.4	0.10	6	15	0.86	.111...1	....111.	.1.....1	....
1958 Chandra	10.70	0.0801	0.013	34.02	2.5	0.10	2	3	0.50	.111...1	.....11.	.1.....1	....
1960 Guisan	11.93	0.0496	0.005	24.55	1.2	0.43	3	5	1.00	.1.1...1	....111.	.1.....1	....
1961 Dufour	10.60	0.0402	0.003	50.31	1.6	0.10	8	20	1.00	.111...1	....111.	.1.....1	...1....
1963 Bezovec	10.91	0.0383	0.002	44.67	1.1	0.10	11	31	1.00	1111...1	....111.	1	....
1969 Alain	11.60	0.0682	0.016	24.37	2.4	0.10	2	2	0.29	111....1	...1.1..	.1.....1	...1....
1970 1954 ER	12.00	0.0585	0.013	21.88	2.0	0.10	2	2	0.40	.1.1...1	.....11.	.1.....1	....
1984 Fedynskij	11.10	0.0445	0.005	37.98	1.9	0.22	5	14	1.00	.1.1...1	....111.	..1....1	....
1985 Hopmann	10.80	0.0671	0.014	35.51	3.1	0.21	2	6	1.00	.1.1...1	....111.	.11....1	....
1994 Shane	11.60	0.0640	0.003	25.15	0.6	0.10	7	19	1.00	.111...1	....111.	1	....
1997 Leverrier	13.40	0.1662	0.040	6.81	0.7	0.10	2	2	1.00	.111...1	....11..	.1.....1	....
1999 Hirayama	10.60	0.0882	0.012	33.95	2.1	0.10	1	3	1.00	.1.....1	....111.	1	....
2002 Euler	12.10	0.0839	0.015	17.44	1.4	0.10	2	3	1.00	.111...1	....11..	.1.....1	....
2007 McCuskey	11.80	0.0703	0.007	21.88	1.0	0.10	4	9	1.00	.111...1	....111.	.1..1..1	...1....
2008 Konstitutsiya	10.30	0.0531	0.003	50.26	1.2	0.10	6	17	1.00	.111...1	....111.	1	....
2009 Voloshina	10.80	0.0698	0.009	34.82	2.1	0.10	2	4	0.40	.1.1...1	....111.	.1.....1	....
2016 Heinemann	11.40	0.0999	0.012	22.07	1.3	0.83	5	12	0.83	.111...1	....111.	.1.....1	....
2020 Ukko	11.40	0.1051	0.020	21.52	1.8	0.10	2	2	0.40	.111...1	.....1..	.1.....1	....
2025 1953 LG	10.50	0.0689	0.008	40.23	2.1	0.10	2	6	1.00	.1.1...1	....111.	1	...1....
2032 Ethel	11.90	0.0233	0.003	36.31	1.8	0.10	3	6	0.60	.1.1...1	....111.	.1..1..1	....
2038 Bistro	12.30	0.1342	0.030	12.58	1.2	0.10	1	2	0.07	..1...11	...111..	.1..1..1	....
2041 Lancelot	12.20	0.1303	0.026	13.37	1.2	0.10	1	2	1.00	..11...1	....11..	.1.....1	...1....
2043 Ortutay	10.80	0.0423	0.006	44.69	3.0	0.41	5	10	1.00	11.1...1	....111.	.1.....1	....
2052 Tamriko	10.48	0.1225	0.020	30.45	2.2	0.10	2	3	0.50	.1.....1	....11..	.1.....1	....
2057 Rosemary	11.90	0.1185	0.018	16.10	1.1	0.10	1	3	0.17	..11..11	...1111.	.1.....1	....
2058 Roka	11.00	0.1542	0.056	21.36	3.1	0.58	3	3	0.75	.111...1	.....1..	.11....1	....
2064 Thomsen	12.53	0.0920	0.025	13.67	1.5	0.10	1	2	0.14	1	...1.11.	.1.....1	....
2067 Aksnes	10.48	0.0626	0.006	42.59	2.0	0.43	2	4	1.00	.1.....1	....111.	.1.....1	....
2068 Dangreen	11.50	0.0393	0.002	33.61	0.9	0.10	5	14	0.83	.111...1	....111.	1	....
2069 Hubble	11.10	0.0538	0.008	34.53	2.3	0.58	6	18	1.00	.111...1	....111.	.11....1	....
2081 Sazava	12.14	0.0479	0.008	22.67	1.7	0.40	5	7	0.83	.111...1	....111.	.11.1..1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
2084 Okayama	12.20	0.0621	0.018	19.37	2.3	0.96	7	14	0.88	.1.1...1	....111.	.11....1	....
2091 Sampo	10.20	0.1582	0.014	30.48	1.3	0.10	6	11	0.67	.111...1	....111.	.1.....1	....
2094 Magnitka	12.00	0.1739	0.035	12.69	1.1	0.10	2	2	0.29	..11...1	...1.1..	.1.....1	....
2103 1960 FL	10.80	0.1625	0.033	22.81	2.0	0.10	2	2	0.50	.11....1	.....1..	.1.....1	....
2105 Gudy	10.70	0.1831	0.012	22.51	0.7	0.10	8	20	1.00	.111...1	....111.	.1..1..1	....
2107 Ilmari	11.40	0.1992	0.040	15.63	1.4	0.10	2	3	0.20	.11....1	...111..	.1.....1	....
2108 Otto Schmidt	11.50	0.1215	0.017	19.11	1.2	0.10	2	5	0.67	.111...1	....111.	.1.....1	....
2114 Wallenquist	11.10	0.0838	0.016	27.67	2.3	0.10	1	2	0.25	.1.....1	...1.11.	.1.....1	....
2115 Irakli	11.00	0.1585	0.031	21.07	1.8	0.10	2	2	0.40	.111...1	.....1..	.1.....1	....
2116 Mtskheta	12.10	0.0648	0.006	19.85	0.8	0.10	6	14	1.00	.111...1	....111.	.1.....1	....
2120 Tyumenia	10.40	0.0721	0.009	41.19	2.4	0.68	4	12	1.00	.1.1...1	....111.	1	....
2123 Vltava	11.50	0.2135	0.046	14.42	1.3	0.10	2	2	0.67	..11...1	.....1..	.1.....1	....
2127 Tanya	10.70	0.0601	0.005	39.28	1.5	0.10	6	17	1.00	.1.1...1	....111.	1	....
2131 Mayall	12.72	0.2391	0.031	7.77	0.5	0.10	3	3	0.75	.11....1	.....1..	.1.....1	....
2132 Zhukov	11.40	0.0593	0.015	28.66	3.0	0.41	3	4	0.50	.111...1	....11..	.11.1..1	...1....
2137 Priscilla	11.10	0.0382	0.005	41.01	2.3	0.10	2	6	1.00	.1.1...1	....111.	..1....1	....
2140 Kemerovo	10.90	0.0887	0.011	29.49	1.6	0.10	3	4	1.00	.111...1	.....11.	.1.....1	....
2145 Blaauw	10.60	0.0869	0.010	34.20	1.9	0.96	4	10	1.00	.111...1	....111.	.1.....1	....
2147 Kharadze	11.70	0.0439	0.008	28.99	2.4	0.10	1	2	0.17	.1.1...1	...1.11.	.1.....1	....
2152 Hannibal	10.50	0.0508	0.002	46.87	1.0	0.10	10	29	1.00	.1.1...1	....111.	1	....
2153 Akiyama	11.90	0.1089	0.020	16.79	1.4	0.10	2	2	1.00	.111...1	.....1..	.1.....1	....
2169 Taiwan	12.00	0.0991	0.021	16.81	1.5	0.10	2	2	1.00	.1.1...1	.....1..	.1.....1	....
2171 Kiev	13.60	0.0773	0.019	9.11	0.9	0.10	2	2	0.29	..1....1	...1.1..	.1.....1	....
2177 Oliver	11.30	0.1279	0.034	20.42	2.2	0.10	1	2	0.25	..1....1	...111..	.1.....1	....
2179 Platzeck	11.50	0.1149	0.023	19.65	1.7	0.10	1	2	0.50	.1.....1	....11..	.1.....1	....
2182 Semirot	11.30	0.0845	0.014	25.13	1.9	0.10	2	4	0.33	.111...1	....111.	.1.....1	....
2184 Fujian	11.50	0.0642	0.014	26.28	2.4	0.25	4	4	0.80	.111...1	.....1..	.1.....1	....
2185 Guangdong	11.30	0.1840	0.041	17.03	1.6	0.10	1	2	0.50	.1.1...1	....11..	.1..1..1	....
2191 Uppsala	11.30	0.1734	0.029	17.54	1.3	0.10	2	3	0.40	.111...1	....11..	.1.....1	....
2196 Ellicott	10.25	0.0400	0.003	59.21	1.9	0.10	2	6	1.00	.1.1...1	....111.	1	...1....
2197 Shanghai	11.20	0.1170	0.021	22.36	1.8	0.10	2	2	0.67	.111...1	.....1..	.1.....1	....
2201 Oljato	15.25	0.4328	0.030	1.80	0.1	0.10	4	11	0.67	.1....11	....111.	1	....
2204 Lyyli	11.60	0.0631	0.014	25.32	2.4	0.84	4	11	0.67	.111...1	....111.	.1.....1	....
2207 Antenor	8.89	0.0678	0.006	85.11	3.7	0.10	5	9	1.00	.111...1	.....11.	.1.....1	....
2208 Pushkin	10.96	0.0497	0.008	38.31	2.8	0.99	5	12	0.83	.111...1	....111.	.1.....1	....
2209 Tianjin	10.90	0.2854	0.049	16.44	1.2	0.10	2	4	0.40	.1.1...1	....111.	.1.....1	....
2214 Carol	12.00	0.0440	0.004	25.22	1.1	0.10	6	15	1.00	.1.1...1	....111.	.1.....1	...1....
2215 Sichuan	11.90	0.1398	0.028	14.82	1.3	0.10	1	2	0.33	11.....1	....11..	.1.....1	....
2217 Eltigen	10.80	0.1242	0.020	26.10	1.9	0.10	2	4	1.00	1111...1	....11..	.1.....1	...1....
2218 Wotho	11.20	0.0673	0.007	29.49	1.3	0.10	9	16	0.90	.111...1	....111.	.1.....1	...1....
2219 Mannucci	10.70	0.0594	0.008	39.49	2.5	0.10	2	5	1.00	.1.1...1	....111.	1	....
2222 Lermontov	11.40	0.0761	0.022	25.29	3.0	0.86	2	6	1.00	.1.....1	....111.	.11.1..1	....
2223 Sarpedon	9.41	0.0340	0.003	94.63	4.0	0.10	4	11	1.00	.111...1	....111.	.1.....1	....
2235 Vittore	10.70	0.0469	0.006	44.45	2.5	0.10	4	11	0.80	.111...1	....111.	.11....1	...1....
2237 Melnikov	11.30	0.1265	0.015	20.54	1.1	0.10	4	8	1.00	.1.1...1	....111.	.11....1	....
2238 Steshenko	11.90	0.0937	0.016	18.10	1.3	0.10	3	5	0.75	.1.1...1	....111.	.1.....1	....
2239 Paracelsus	11.50	0.0293	0.003	38.93	1.7	0.10	8	20	0.89	.111...1	....111.	..1....1	...1....
2240 Tsai	11.80	0.0544	0.011	24.87	2.2	0.10	2	4	0.50	.111...1	....111.	.11....1	....
2241 1979 WM	8.64	0.0471	0.005	114.63	5.8	0.10	1	3	0.33	.1.1...1	....111.	1	....
2245 Hekatostos	11.30	0.0622	0.005	29.28	1.0	0.10	4	10	1.00	.111...1	....111.	1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
2246 Bowell	10.56	0.0540	0.009	44.21	3.2	0.18	3	6	0.60	.111...1	....111.	.11....1	....
2248 Kanda	11.20	0.0930	0.017	25.08	2.0	0.10	2	3	0.20	.111...1	...111..	.1..1..1	1..1.1..
2249 Yamamoto	11.00	0.0305	0.006	48.03	4.2	0.68	2	4	1.00	.1.1...1	....111.	1	....
2251 Tikhov	11.40	0.0697	0.008	26.42	1.5	0.10	4	7	1.00	.111...1	....111.	.1..1..1	....
2255 Qinghai	11.30	0.1018	0.016	22.90	1.6	0.20	2	4	1.00	.111...1	....111.	.1..1..1	....
2258 Viipuri	11.40	0.0883	0.012	23.48	1.4	0.10	3	4	1.00	.1.1...1	.....11.	.1.....1	....
2259 Sofievka	12.60	0.0365	0.009	21.00	2.1	0.10	1	2	0.33	.1.1...1	....11..	.1.....1	....
2260 Neoptolemus	9.31	0.0650	0.007	71.65	3.4	0.10	5	7	1.00	.1.1...1	.....11.	.1.....1	...1....
2263 Shaanxi	10.90	0.1803	0.020	20.68	1.0	0.10	7	12	1.00	1111...1	....111.	.1.....1	....
2264 Sabrina	10.50	0.1472	0.014	27.52	1.3	0.10	5	11	1.00	.1.1...1	....111.	.1.....1	....
2266 Tchaikovsky	10.80	0.0384	0.013	46.94	6.2	0.56	3	6	1.00	.111...1	....111.	.11....1	....
2269 Efremiana	10.50	0.2123	0.033	22.92	1.6	0.10	3	3	0.50	.1.1...1	.....1..	.1.....1	....
2271 Kiso	11.60	0.0388	0.012	32.28	4.0	0.96	3	6	0.75	.111...1	....111.	.11....1	....
2279 Barto	12.97	0.0475	0.007	15.53	1.1	0.10	3	5	0.60	.111...1	....11..	.1..1..1	....
2291 Kevo	10.80	0.0708	0.006	34.57	1.4	0.10	4	7	1.00	11.1...1	....111.	.1.....1	....
2295 Matusovskij	12.00	0.0632	0.014	21.05	2.0	0.10	1	2	0.50	..1....1	.....11.	.1.....1	....
2297 Daghestan	11.00	0.1057	0.018	25.80	2.0	0.30	7	11	1.00	.111...1	....111.	.11....1	....
2304 Slavia	12.40	0.1372	0.027	11.88	1.0	0.10	2	2	0.18	..1....1	...1.1..	.1.....1	....
2306 1939 PM	11.40	0.1076	0.023	21.27	1.9	0.10	2	2	0.33	.11....1	.....1..	.1.....1	....
2307 1957 HJ	10.90	0.0454	0.003	41.21	1.3	0.10	5	14	1.00	.111...1	....111.	1	....
2308 Schilt	11.80	0.1094	0.011	17.55	0.8	0.15	8	18	0.89	.111...1	....111.	.1.....1	....
2309 Mr. Spock	11.30	0.1177	0.020	21.29	1.6	0.10	1	3	0.50	..1...11	....111.	.1.....1	....
2310 Olshaniya	11.30	0.0498	0.011	32.73	3.1	0.10	3	3	0.33	1.11...1	.....1..	.11....1	...1....
2311 El Leoncito	10.52	0.0388	0.005	53.14	3.0	0.15	4	10	0.67	.111...1	....111.	.11.1..1	...1....
2312 Duboshin	10.18	0.0496	0.006	54.94	3.1	0.10	3	6	1.00	.1.1...1	....111.	.1.....1	....
2313 1976 TA	12.90	0.0506	0.008	15.54	1.1	0.10	2	3	0.67	.1.....1	....11..	.1.....1	....
2315 Czechoslovakia	10.70	0.1686	0.018	23.45	1.1	0.10	2	5	1.00	.1.....1	....111.	.1.....1	...1....
2320 Blarney	10.50	0.0740	0.012	38.81	2.9	0.36	7	11	1.00	.111...1	....111.	.1.....1	...1....
2321 Luznice	11.50	0.1421	0.028	17.67	1.5	0.10	2	2	1.00	.111...1	.....1..	.1.....1	...1....
2322 Kitt Peak	12.70	0.0571	0.009	16.04	1.1	0.10	2	4	0.50	.1.1...1	....11..	.1.....1	...1....
2326 Tololo	11.10	0.0384	0.003	40.89	1.6	0.10	15	41	1.00	.111...1	....111.	.11....1	...1....
2330 Ontake	11.30	0.0488	0.007	33.05	2.1	0.20	3	5	0.75	.111...1	.....11.	.1.....1	....
2332 Kalm	10.60	0.1162	0.016	29.58	1.9	0.10	3	6	0.75	.1.1...1	....111.	.1.....1	....
2333 Porthan	11.50	0.0952	0.014	21.59	1.4	0.10	3	4	0.50	.111...1	....11..	.1.....1	....
2345 Fucik	10.80	0.1192	0.019	26.63	1.9	0.10	2	3	0.40	.111...1	.....11.	.1.....1	....
2349 Kurchenko	11.90	0.0663	0.026	21.52	3.3	0.61	2	2	0.40	.111...1	.....1..	.1.....1	....
2355 Nei Monggol	11.40	0.1693	0.032	16.96	1.4	0.10	2	3	0.33	.111...1	....11..	.1.....1	....
2356 Hirons	10.80	0.0401	0.003	45.94	1.8	0.10	5	10	1.00	.1.1...1	....111.	....1..1	...1....
2357 Phereclos	8.94	0.0521	0.005	94.90	4.3	0.10	2	4	0.50	.1.1...1	.....11.	1	....
2363 Cebriones	9.11	0.0599	0.008	81.84	5.1	0.10	4	9	1.00	.111...1	....111.	.11....1	....
2370 van Altena	12.60	0.0899	0.018	13.38	1.2	0.10	3	3	0.50	.1.1...1	....11..	.1.....1	....
2372 Proskurin	11.60	0.0780	0.011	22.77	1.5	0.10	2	3	1.00	.111...1	.....11.	.1..1..1	....
2376 Martynov	10.90	0.0536	0.004	37.92	1.3	0.10	5	15	1.00	.1.1.1.1	....111.	1	....
2378 1935 CY	10.70	0.0891	0.016	32.26	2.5	0.10	1	3	1.00	.1.....1	....111.	1	....
2379 Heiskanen	10.90	0.0772	0.018	31.60	3.2	0.50	4	7	0.44	.111...1	....111.	.11....1	...1....
2381 Landi	11.40	0.3358	0.056	12.04	0.9	0.10	2	2	0.25	.1.1...1	...1.1..	.1.....1	....
2386 Nikonov	12.20	0.1456	0.029	12.65	1.1	0.10	2	2	0.29	.11....1	...1.1..	.1.....1	....
2390 Nezarka	12.20	0.0450	0.011	22.74	2.4	0.10	1	2	0.25	..1....1	...111..	.1.....1	....
2393 Suzuki	10.50	0.0471	0.008	48.67	3.6	0.98	7	21	0.88	.1.1...1	....111.	....	....
2405 Welch	12.09	0.0399	0.005	25.43	1.6	0.10	3	5	0.60	.111...1	....111.	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
2408	Astapovich	12.50	0.0407	0.005	20.83	1.3	0.10	3	4	0.75	.1.1...1	....11..	.1.....1	....
2413	van de Hulst	10.80	0.1624	0.032	22.82	2.0	0.10	1	2	0.33	.1.1...1	.....11.	.1.....1	....
2414	Vibeke	10.91	0.0755	0.011	31.82	2.2	0.54	6	17	1.00	.111...1	....111.	.11....1	....
2421	Nininger	10.80	0.0559	0.005	38.89	1.7	0.10	6	15	0.75	.111...1	....111.	.1..1..1	...1....
2426	Simonov	11.40	0.0842	0.014	24.04	1.8	0.10	2	3	1.00	.1.1...1	....11..	.1.....1	....
2428	Kamenyar	11.00	0.0864	0.007	28.54	1.1	0.10	5	10	1.00	.111...1	....111.	.1.....1	...1....
2439	Ulugbek	11.50	0.1065	0.012	20.41	1.0	0.10	5	9	1.00	.111...1	....111.	.1.....1	....
2441	Hibbs	13.90	0.0494	0.009	9.93	0.8	0.10	2	3	0.67	.1.1...1	....11..	.1.....1	....
2443	Tomeileen	10.20	0.1540	0.017	30.89	1.6	0.10	2	6	1.00	.1.1...1	....111.	.1.....1	....
2448	Sholokhov	10.40	0.1337	0.030	30.24	2.9	0.88	5	14	1.00	.1.1...1	....111.	.11....1	....
2456	Palamedes	9.60	0.0304	0.002	91.66	3.1	0.10	6	12	0.86	.111...1	....111.	.1.....1	....
2458	1977 RC7	11.80	0.0584	0.007	24.01	1.4	0.10	3	4	0.43	.111...1	.....11.	.1.....1	...1....
2459	Spellmann	12.00	0.0500	0.018	23.66	3.4	1.00	5	6	0.63	.111...1	.....11.	.11....1	...1....
2461	1981 EC1	11.40	0.0835	0.008	24.14	1.0	0.10	4	8	0.67	.111...1	....111.	.1.....1	....
2463	Sterpin	11.80	0.2831	0.052	10.91	0.9	0.10	1	2	1.00	.1.....1	....11..	.1..1..1	...1....
2465	1949 PK	12.00	0.0706	0.013	19.91	1.7	0.10	2	2	1.00	.111...1	.....1..	.1.....1	...1....
2474	Ruby	11.80	0.1064	0.047	17.79	3.0	1.00	7	17	1.00	.111...1	....111.	.11.1..1	...1....
2476	Andersen	10.90	0.1697	0.026	21.32	1.5	0.31	5	9	0.71	.111...1	....111.	.1.....1	....
2483	Guinevere	10.80	0.0433	0.009	44.17	3.9	0.10	1	2	0.17	.1.1...1	...1.11.	.1.....1	....
2492	Kutuzov	11.30	0.0975	0.041	23.39	3.8	0.99	4	6	1.00	.111...1	....111.	.11....1	....
2494	Inge	10.60	0.0329	0.002	55.61	1.8	0.10	2	6	1.00	.1.1...1	....111.	1	....
2502	Nummela	11.70	0.1349	0.051	16.54	2.4	0.92	4	8	0.67	.1.1...1	....111.	.11....1	....
2512	Tavastia	12.70	0.1057	0.024	11.79	1.2	0.10	1	2	0.13	..1....1	...111..	.1.....1	...1....
2513	Baetsle	13.40	0.0278	0.007	16.67	1.8	0.10	1	2	0.25	..11...1	...1.11.	.1.....1	....
2522	1980 PP	11.60	0.0964	0.022	20.49	2.0	0.10	2	2	0.29	..1...11	...1.1..	.1.....1	....
2524	Budovicium	10.90	0.0783	0.009	31.39	1.6	0.10	5	6	0.63	.111...1	.....11.	.1.....1	...1....
2531	Cambridge	10.90	0.2104	0.050	19.15	1.9	0.10	2	2	0.67	.111...1	....11..	.1..1..1	....
2534	Houzeau	10.90	0.0794	0.016	31.16	2.8	0.10	2	3	0.50	.111...1	....11..	.11....1	....
2542	Calpurnia	11.40	0.0639	0.012	27.61	2.3	0.10	2	3	0.40	.1.....1	.....11.	.1.....1	...1....
2544	Gubarev	13.00	0.1323	0.014	9.18	0.5	0.10	5	8	0.50	.111...1	....11..	.1.....1	....
2559	1981 UH	12.40	0.0297	0.006	25.53	2.4	0.10	1	2	0.50	.1.....1	.....11.	.1.....1	....
2563	Boyarchuk	11.30	0.0614	0.008	29.49	1.8	0.10	3	5	0.43	.1.1...1	.....11.	.1.....1	....
2569	Madeline	11.20	0.0741	0.009	28.09	1.5	0.10	5	9	1.00	.111...1	....111.	.11....1	....
2570	Porphyro	12.20	0.0297	0.004	27.99	1.7	0.10	3	4	0.60	.1.1...1	....111.	.1.....1	....
2582	Harimaya-Bashi	10.50	0.1337	0.043	28.87	3.8	0.64	3	3	0.60	.111...1	.....1..	.11....1	....
2595	Gudiachvili	12.20	0.0223	0.005	32.30	3.1	0.10	1	2	0.14	.1.....1	...111..	.1.....1	....
2613	Plzen	11.20	0.0737	0.013	28.17	2.2	0.10	3	3	0.50	..11..11	.....1..	.1..1..1	11......
2617	Jiangxi	10.40	0.0441	0.008	52.65	4.3	0.43	3	8	1.00	.1.1...1	....111.	.1.....1	....
2621	Goto	10.70	0.0428	0.004	46.53	1.8	0.18	7	21	1.00	.111...1	....111.	1	....
2632	Guizhou	11.40	0.0576	0.006	29.07	1.4	0.10	4	7	1.00	.111...1	....111.	.1.....1	....
2634	James Bradley	10.20	0.0923	0.014	39.91	2.7	0.10	2	4	0.40	.1.1...1	....111.	.1.....1	....
2645	Daphne Plane	12.30	0.0875	0.015	15.58	1.2	0.10	3	3	0.43	.11....1	.....1..	.1.....1	....
2646	Abetti	11.60	0.0808	0.017	22.38	2.1	0.10	2	2	0.20	.11....1	...1.1..	.1.....1	..11....
2654	Ristenpart	12.50	0.0419	0.006	20.52	1.3	0.10	4	5	0.50	1111...1	....111.	.1.....1	....
2659	Millis	11.20	0.0831	0.015	26.53	2.1	0.10	2	2	0.33	.1.....1	.....1..	.1.....1	....
2660	Wasserman	12.10	0.2384	0.048	10.35	0.9	0.21	3	4	0.27	.111...1	...111..	.11....1	....
2667	1967 UO	12.20	0.0429	0.005	23.30	1.3	0.17	3	4	0.43	.1.1...1	.....11.	.1.....1	....
2672	Pisek	11.70	0.0907	0.008	20.18	0.8	0.10	4	8	0.67	.111...1	....111.	.1.....1	....
2674	Pandarus	9.38	0.0326	0.002	97.91	3.2	0.10	6	11	1.00	.111...1	....111.	.1.....1	....
2677	1935 FF	11.60	0.0955	0.021	20.59	2.0	0.10	2	2	0.40	.111...1	.....11.	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											12345678	1111111 90123456	11122222 7890:234	22222333 56789012
2687	1982 HG	11.89	0.2170	0.038	11.95	0.9	0.10	3	3	0.43	..1....1	.....1..	.1.....1	....
2690	Ristiina	11.10	0.1585	0.024	20.12	1.4	0.10	3	4	1.00	.111...1	....11..	.1.....1	....
2695	Christabel	12.30	0.0995	0.018	14.61	1.1	0.10	2	2	0.67	..11..11	.....1..	.1.....1	....
2696	Magion	12.00	0.0687	0.008	20.18	1.0	0.10	1	3	1.00	..11..11	....111.	.1.....1	....
2697	Albina	10.20	0.0553	0.003	51.54	1.4	0.10	6	16	1.00	.111...1	....111.	1	...1....
2707	Ueferji	11.60	0.0578	0.006	26.47	1.3	0.10	4	6	1.00	.111...1	....111.	.1.....1	...1....
2715	Mielikki	11.90	0.1791	0.027	13.09	0.9	0.10	2	3	0.40	.1.1...1	....11..	.1.....1	....
2718	1951 OM	11.70	0.0547	0.006	25.97	1.3	0.10	5	10	0.71	.111...1	....111.	.1.....1	....
2724	Orlov	11.70	0.0947	0.037	19.74	3.0	0.37	2	2	0.50	.111...1	.....1..	.11....1	....
2725	David Bender	10.40	0.0759	0.005	40.14	1.2	0.12	12	33	1.00	.111...1	....111.	1	...1....
2728	Yatskiv	12.40	0.0804	0.019	15.52	1.5	0.47	4	7	0.40	.111...1	....111.	.11....1	....
2729	1979 UA2	11.40	0.1353	0.030	18.96	1.8	0.10	2	2	0.25	..11...1	...1.1..	.1.....1	....
2731	Cucula	10.70	0.0358	0.002	50.88	1.3	0.10	4	10	1.00	.111...1	....111.	....	....
2734	Hasek	11.40	0.0958	0.017	22.54	1.8	0.10	2	2	0.33	.111...1	.....1..	.1.....1	....
2747	1980 DW	11.60	0.0405	0.008	31.61	2.7	0.10	1	2	0.50	..11...1	.....11.	.1.....1	.....1..
2753	Duncan	12.30	0.0660	0.009	17.93	1.1	0.10	2	3	1.00	.1.1...1	....11..	.1..1..1	....
2757	Crisser	11.30	0.1423	0.017	19.36	1.0	0.10	2	4	1.00	...1..11	....111.	.1..1..1	....
2759	Idomeneus	9.80	0.0571	0.011	61.01	5.3	0.10	1	2	0.25	.1.....1	...1.11.	.1.....1	....
2760	Kacha	10.04	0.0508	0.010	57.90	5.0	1.00	5	12	1.00	.111...1	....111.	1	....
2774	Tenojoki	11.10	0.0506	0.009	35.60	2.9	0.60	4	11	1.00	.1.1...1	....111.	.1.....1	....
2793	Valdaj	10.80	0.1100	0.033	27.73	3.4	0.41	2	3	1.00	.111...1	....11..	.11....1	....
2797	Teucer	8.40	0.0624	0.005	111.14	4.1	0.10	6	11	0.86	.111...1	.....11.	.1.....1	....
2804	Yrjo	11.70	0.0708	0.016	22.84	2.2	0.10	1	2	0.17	.1.....1	...111..	.1.....1	....
2813	Zappala	11.00	0.0663	0.008	32.57	1.8	0.10	3	9	1.00	.1.1...1	....111.	.1.....1	....
2816	Pien	11.70	0.0769	0.014	21.91	1.8	0.10	1	3	1.00	..11...1	....111.	.1.....1	....
2826	Ahti	10.80	0.0628	0.010	36.71	2.7	0.44	8	24	1.00	.111...1	....111.	.11....1	....
2829	1948 PK	10.30	0.0916	0.013	38.25	2.4	0.10	3	4	0.50	1111...1	....11..	.1..1..1	..11....
2835	Ryoma	12.10	0.0404	0.010	25.16	2.5	0.10	1	2	0.33	.1.1...1	.....11.	.1.....1	.....1..
2843	Yeti	13.00	0.1030	0.025	10.40	1.1	0.10	2	2	0.29	1.11...1	...1.1..	.1..1..1	...1....
2846	Ylppo	10.70	0.1170	0.017	28.15	1.8	0.12	3	6	0.60	.1.1...1	....111.	.11....1	....
2856	1933 GB	11.00	0.1223	0.013	23.99	1.2	0.10	4	7	0.50	.1.1...1	....111.	.1.....1	....
2864	Soderblom	12.50	0.0632	0.007	16.72	0.9	0.10	4	6	0.67	.1.1...1	....111.	.1.....1	.....1..
2865	1935 OK	11.40	0.2242	0.043	14.73	1.2	0.10	2	3	1.00	.1.1...1	....11..	.1.....1	....
2872	Gentelec	12.40	0.0900	0.015	14.68	1.1	0.10	2	3	0.33	.111...1	....11..	.1.....1	....
2879	Shimizu	11.70	0.0463	0.004	28.24	1.1	0.10	7	17	1.00	.111...1	....111.	.1.....1	....
2892	Filipenko	10.20	0.0466	0.002	56.13	1.4	0.10	4	12	1.00	.111...1	....111.	1	....
2893	Peiroos	9.23	0.0469	0.008	87.46	6.9	0.50	3	5	0.75	.1.....1	.....11.	.1.....1	....
2904	Millman	11.60	0.1421	0.041	16.88	2.0	0.17	2	2	0.33	1.1...11	.....1..	.1.....1	....
2906	Caltech	10.00	0.0526	0.004	57.98	2.3	0.10	5	13	1.00	.111...1	....111.	..1....1	....
2908	Shimoyama	11.50	0.0514	0.005	29.38	1.4	0.10	4	7	0.67	.1.1...1	....111.	.1.....1	....
2920	Automedon	8.80	0.0433	0.007	111.01	7.5	0.49	6	13	1.00	.111...1	....111.	.1..1..1	...1....
2933	Amber	11.70	0.0869	0.010	20.62	1.1	0.10	3	9	0.60	.1.1...1	....111.	.1.....1	....
2934	Aristophanes	11.20	0.0780	0.009	27.39	1.4	0.10	6	9	0.75	.111...1	....111.	.1.....1	....
2945	1935 ST1	12.20	0.0522	0.006	21.12	1.1	0.10	2	6	0.40	..11..11	....111.	.1.....1	....
2950	1974 VQ2	11.90	0.1728	0.045	13.33	1.5	0.19	2	2	0.29	.111...1	...1.1..	.1.....1	....
2951	1977 RB8	10.00	0.0735	0.018	49.04	5.0	1.00	6	16	1.00	.1.1...1	....111.	..1....1	....
2957	1934 CB1	10.20	0.2235	0.043	25.64	2.2	0.10	2	2	0.29	..1....1	...1.11.	.1.....1	...1....
2959	Scholl	11.20	0.0503	0.006	34.11	1.9	0.91	3	4	0.75	.1.1...1	....11..	.1.....1	....
2967	Vladisvyat	11.00	0.0721	0.018	31.24	3.3	0.86	4	12	1.00	.1.1...1	....111.	.11....1	....
2976	Lautaro	10.90	0.0522	0.007	38.42	2.3	0.38	3	8	0.75	.111...1	....111.	1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
2983	Poltava	11.20	0.0614	0.007	30.86	1.5	0.18	6	15	0.86	.111...1	....111.	.1.....1	....
2986	Mrinalini	11.90	0.0729	0.009	20.53	1.2	0.19	5	9	0.71	.111...1	....111.	.11....1	....
2987	Sarabhai	12.10	0.0791	0.017	17.97	1.7	0.10	2	2	0.25	..1....1	...1.1..	.1.....1	....
2993	1970 PA	12.30	0.1876	0.025	10.64	0.6	0.10	2	3	0.33	.111...1	....11..	.1.....1	....
2995	Taratuta	12.40	0.0704	0.011	16.59	1.2	0.10	2	3	1.00	.111...1	....11..	.1..1..1	....
2996	Bowman	11.80	0.0689	0.014	22.10	2.0	0.10	1	2	0.50	..11..11	.....11.	.1.....1	....
3009	Coventry	14.10	0.1096	0.024	6.08	0.6	0.10	2	2	0.20	.11....1	...1.1..	.1.....1	...1....
3013	Dobrovoleva	13.30	0.0696	0.012	11.02	0.8	0.10	1	2	0.50	.1.....1	....11..	.1..1..1	....
3017	1981 UL	12.20	0.0938	0.018	15.76	1.3	0.10	2	2	0.67	..11...1	.....1..	.1.....1	....
3024	Hainan	10.70	0.0731	0.011	35.63	2.5	0.10	3	4	1.00	.111...1	....111.	.1.....1	....
3028	1978 TA2	10.70	0.1417	0.017	25.58	1.4	0.10	5	7	1.00	.111...1	....111.	.1.....1	....
3032	Evans	11.40	0.0923	0.023	22.97	2.4	0.10	1	2	0.17	.1.....1	...1.11.	.1.....1	...1....
3036	Krat	9.80	0.1182	0.010	42.39	1.7	0.10	3	9	1.00	.111...1	....111.	1	....
3037	1944 BA	11.60	0.1131	0.011	18.91	0.8	0.10	3	8	0.75	.1.....1	....111.	.1.....1	...1....
3044	1983 RE3	12.00	0.0594	0.013	21.71	2.0	0.56	3	7	1.00	11.1...1	....111.	.1.....1	....
3046	Moliere	12.20	0.0562	0.027	20.36	3.7	0.70	2	3	1.00	.111...1	....111.	.11.1..1	...1....
3052	Herzen	13.10	0.0441	0.009	15.18	1.3	0.10	1	2	0.25	..11...1	...111..	.1.....1	...1....
3054	Strugatskia	11.30	0.0845	0.012	25.14	1.6	0.10	2	3	1.00	.1.1...1	....11..	.1.....1	....
3056	INAG	12.90	0.0408	0.013	17.31	2.2	0.26	2	2	0.22	..1....1	...1.1..	.1..1..1	...1....
3062	Wren	10.80	0.1357	0.017	24.97	1.5	0.10	3	5	1.00	.1.1...1	....111.	.1.....1	...1....
3063	Makhaon	8.60	0.0476	0.004	116.14	4.4	0.10	4	9	1.00	.111...1	....111.	1	....
3078	Horrocks	11.60	0.0452	0.008	29.92	2.3	0.19	3	5	0.75	11.1...1	....111.	.11.1..1	....
3082	Dzhalil	12.30	0.0766	0.017	16.65	1.6	0.10	2	2	0.40	..1....1	.....1..	.1.....1	....
3089	1981 XK2	11.00	0.0618	0.011	33.72	2.6	1.00	3	8	1.00	.111...1	....111.	.1.....1	....
3092	Herodotus	11.00	0.0572	0.011	35.07	3.1	0.10	1	3	0.33	...1...1	....111.	.1.....1	....
3094	Chukokkala	12.00	0.0555	0.005	22.47	1.0	0.10	3	8	1.00	.111...1	....111.	.1.....1	....
3109	1974 DC	11.60	0.0769	0.007	22.94	1.0	0.10	3	9	1.00	.111...1	....111.	.1.....1	....
3115	Baily	11.30	0.1639	0.015	18.04	0.8	0.10	4	6	1.00	.111...1	....11..	.1.....1	....
3118	1974 OD	10.90	0.0714	0.007	32.86	1.5	0.10	4	8	1.00	.111...1	....111.	.1.....1	....
3134	Kostinsky	10.70	0.0371	0.005	50.01	3.0	0.10	1	3	0.25	.1.1...1	...1111.	1	....
3139	Shantou	9.90	0.1115	0.009	41.69	1.6	0.10	5	12	1.00	.111...1	....111.	.1.....1	....
3140	Stellafane	10.90	0.1259	0.017	24.75	1.5	0.10	4	6	1.00	.1.1...1	....111.	.1.....1	....
3141	1984 RH	10.50	0.0858	0.012	36.05	2.2	0.10	5	6	0.83	.111...1	.....11.	.1.....1	....
3150	Tosa	11.00	0.0875	0.014	28.35	2.0	0.10	3	6	0.75	.1.1...1	....111.	.11....1	....
3152	Jones	11.30	0.0485	0.003	33.18	0.8	0.10	9	27	1.00	.111...1	....111.	1	....
3156	1953 EE	11.30	0.0698	0.008	27.66	1.5	0.10	4	5	0.80	.111...1	.....11.	.1.....1	....
3157	Novikov	11.50	0.0500	0.009	29.79	2.5	0.10	3	3	0.33	.111...1	.....1..	.1..11.1	1111....
3161	Beadell	12.10	0.1629	0.021	12.52	0.7	0.10	5	5	0.71	.111...1	.....1..	.1.....1	....
3164	Prast	11.90	0.0843	0.025	19.09	2 3	0.27	2	2	0.40	.11....1	.....1..	.1.....1	...1....
3167	Babcock	11.40	0.3233	0.074	12.27	1.2	0.10	2	2	0.33	..11...1	.....1..	.1.....1	....
3168	1980 XM	11.80	0.0535	0.012	25.08	2.4	0.10	2	2	0.29	..11...1	...1.1..	.1.....1	....
3176	Paolicchi	10.90	0.0669	0.012	33.94	2.8	0.53	7	15	0.88	.111...1	....111.	.11....1	...1....
3197	Weissman	11.70	0.0790	0.017	21.61	2.0	0.10	2	2	0.29	.111...1	...1.11.	.1.....1	....
3200	Phaethon	14.60	0.0984	0.010	5.09	0.2	0.10	6	18	1.00	.1.....1	....111.	..1....1	....
3222	Liller	11.40	0.0543	0.005	29.95	1.3	0.10	7	19	1.00	.111...1	....111.	.1.....1	....
3224	Irkutsk	11.50	0.0460	0.007	31.07	2.1	0.10	1	3	1.00	.1.....1	....111.	.1.....1	....
3230	Vampilov	12.30	0.0386	0.005	23.45	1.3	0.10	4	4	0.44	.111...1	.....1..	.1.....1	...1....
3237	Victorplatt	10.60	0.1513	0.016	25.93	1.3	0.10	4	8	0.57	.111...1	....111.	.1.....1	....
3247	Di Martino	13.00	0.0591	0.010	13.73	1.0	0.10	3	5	0.38	.111...1	....11..	.11.1..1	...1....
3248	Farinella	10.80	0.0603	0.012	37.46	3.2	0.37	5	6	0.63	.111...1	....11..	..1.1..1	1111....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
3256 Daguerre	12.30	0.0358	0.005	24.37	1.5	0.10	2	4	0.67	.111...1	....111.	.1.....1	....
3264 1934 AF	12.20	0.0534	0.010	20.88	1.8	0.10	1	2	1.00	.1.1...1	....11..	.1.....1	....
3273 Drukar	11.90	0.0278	0.004	33.22	2.3	0.10	5	6	0.71	.111...1	.....11.	.11....1	....
3278 1984 BT	11.20	0.0558	0.008	32.39	2.2	0.10	2	4	1.00	.111...1	....11..	.1.....1	....
3283 1979 QA10	13.00	0.0702	0.026	12.61	1.9	0.51	2	3	0.29	.1.1...1	...111..	.11....1	....
3285 Ruth Wolfe	12.30	0.2857	0.031	8.62	0.4	0.10	5	7	0.71	.1.1...1	....11..	.1.....1	...1....
3298 1979 OB15	13.40	0.0618	0.022	11.17	1.6	0.98	3	6	0.38	.111...1	....111.	.11....1	...1....
3311 1976 QM1	12.10	0.0442	0.021	24.04	4.3	0.72	2	3	0.67	.111...1	....11..	.11....1	....
3317 Paris	8.40	0.0572	0.005	116.16	5.2	0.10	3	6	1.00	.1.1...1	....111.	1	....
3324 1983 CW1	11.80	0.1015	0.035	18.22	2.5	0.34	2	2	0.40	...1...1	.....1..	.1....11	....
3325 TARDIS	11.40	0.0553	0.005	29.66	1.2	0.10	6	9	1.00	...1..11	....111.	.1.....1	....
3339 1978 LB	10.90	0.0719	0.018	32.75	3.4	0.74	6	16	1.00	...1...1	....111.	.11...11	....
3345 Tarkovskij	11.70	0.0629	0.014	24.23	2.3	0.95	6	17	1.00	...1...1	....111.	.....1.11	..11....
3346 1951 SD	11.10	0.0549	0.007	34.19	1.9	0.10	5	10	0.71	...1..11	....111.	.11....1	....
3353 Jarvis	13.30	0.0890	0.009	9.75	0.5	0.10	6	12	0.55	...1..11	....111.	.11.11.1	1111....
3368 Duncombe	11.30	0.0431	0.009	35.20	3.2	0.99	6	10	0.67	...1..11	.....11.	.1.....1	...1....
3379 Oishi	13.30	0.0506	0.018	12.92	1.8	0.81	4	8	0.57	...1..11	....111.	.11.1..1	...1....
3389 Sinzot	12.60	0.0462	0.008	18.67	1.5	0.10	1	3	0.50	...1...1	....111.	.1.....1	....
3396 Muazzez	11.00	0.0497	0.003	37.63	1.1	0.10	6	18	0.86	...1..11	....111.	1	....
3405 1964 UQ	12.30	0.0429	0.012	22.26	2.6	0.88	5	8	1.00	...1..11	....111.	.11....1	....
3406 1969 DA	11.30	0.2898	0.064	13.57	1.3	0.10	2	2	0.40	...1...1	.....1..	.1.....1	....
3415 Danby	10.50	0.1056	0.014	32.49	2.0	0.10	2	4	0.67	...1..11	....111.	.1.....1	....
3418 Izvekov	11.40	0.0657	0.013	27.22	2.4	0.10	2	2	0.20	...1..11	...1.1..	.1....11	...1....
3419 1981 JZ	10.50	0.1020	0.008	33.05	1.2	0.10	5	15	1.00	...1..11	....111.	.1.....1	....
3442 1978 TO7	11.60	0.0563	0.006	26.82	1.3	0.10	4	7	0.57	...1..11	....111.	.1.....1	....
3445 1983 FC	12.10	0.0808	0.007	17.78	0.7	0.10	6	12	0.75	...1..11	....111.	.1.....1	....
3461 1977 SA1	13.50	0.0232	0.004	17.43	1.5	0.10	2	2	0.33	1	.....1..	.1.....1	....
3470 1975 ES	13.20	0.0566	0.010	12.79	1.0	0.10	1	2	0.17	...1..11	...111..	.1.....1	....
3471 Amelin	11.30	0.0609	0.012	29.60	2.6	0.10	1	2	0.33	...1..11	.....11.	.1.....1	....
3475 1972 TD	10.70	0.0981	0.015	30.75	2.1	0.10	3	3	0.75	...1..11	.....11.	.1.....1	....
3476 1978 UF2	11.90	0.0309	0.005	31.53	2.4	0.10	1	2	1.00	1	.....11.	.1.....1	....
3478 Fanale	12.80	0.0600	0.015	14.95	1.6	0.10	1	2	0.50	1	.....11.	.1.....1	...1....
3485 Barucci	12.90	0.0655	0.005	13.66	0.5	0.10	9	18	0.75	...1..11	....111.	.1.....1	....
3501 1971 QU	11.60	0.0935	0.018	20.81	1.7	0.10	2	3	0.33	...1...1	....11..	.1.....1	....
3522 1941 SW	12.20	0.0210	0.004	33.31	3.0	0.10	2	2	0.50	1	.....1..	.1.....1	....
3526 Jeffbell	12.10	0.0418	0.010	24.73	2.5	0.10	1	2	0.25	1	...111..	.1.....1	....
3548 1973 SO	9.40	0.0589	0.007	72.20	4.1	0.10	4	5	0.57	...1..11	.....11.	.1.....1	....
3554 Amun	15.82	0.1353	0.025	2.48	0.2	0.10	1	2	0.07	11	...111..	.1..1..1	...1....
3560 1980 RZ2	10.50	0.1245	0.023	29.92	2.4	0.10	2	2	0.50	...1..11	.....1..	.1.....1	....
3561 Devine	10.70	0.0865	0.013	32.74	2.3	0.10	4	4	0.67	...1..11	.....1..	.1.....1	....
3564 Talthybius	9.00	0.0934	0.010	68.92	3.5	0.10	5	10	1.00	...1..11	.....11.	.1.....1	....
3570 1979 XO	11.40	0.1687	0.045	16.99	1.9	0.17	3	3	0.75	...1..11	.....1..	.11....1	....
3571 1982 EJ	11.10	0.0424	0.008	38.88	3.2	0.10	2	2	0.29	...1..11	...111..	.1.....1	...1....
3578 1977 CC	8.10	0.2610	0.053	62.41	5.5	0.95	4	10	1.00	...1..11	....111.	.11....1	....
3584 1981 TW	12.00	0.0435	0.006	25.38	1.5	0.10	3	6	1.00	...1..11	....111.	.11.1..1	...1....
3591 1978 QJ2	11.50	0.1138	0.022	19.75	1.7	0.10	3	3	0.27	...1...1	...1.1..	.1.....1	....
3598 Saucier	11.80	0.0487	0.011	26.28	2.6	0.10	2	2	0.33	1..1...1	.....1..	.1..1..1	...1....
3614 1983 AE1	10.70	0.0274	0.002	58.12	1.7	0.39	5	13	1.00	1	....111.	....	....
3631 Sigyn	10.40	0.0985	0.017	35.23	2.7	0.74	10	24	0.77	...1..11	....111.	.1.....1	...1....
3637 O'Meara	12.20	0.1362	0.052	13.08	2.0	0.43	2	2	0.29	...1...1	...1.1..	.11....1	...1....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
										12345678	1111111 90123456	11122222 78901234	22222333 56789012
3641 Williams Bay	11.70	0.0372	0.003	31.50	1.0	0.10	8	21	0.89	...1..11	....111.	.1.....1	....
3642 Frieden	11.20	0.0475	0.003	35.11	1.1	0.10	7	20	1.00	...1..11	....111.	.1.....1	....
3647 Dermott	11.50	0.0472	0.008	30.67	2.2	0.72	7	17	1.00	...1..11	....111.	.1..1..1	...1....
3650 1978 UO2	12.00	0.0352	0.006	28.20	2.1	0.46	2	6	0.50	11	....111.	1	....
3660 Lazarev	11.30	0.0742	0.013	26.82	2.0	0.50	5	9	0.56	1..1..11	....11..	.11....1	....
3666 1979 HP	11.90	0.0541	0.007	23.83	1.4	0.10	4	5	0.67	11	.....11.	.1.....1	...1....
3682 A923 NB	11.50	0.1189	0.009	19.32	0.7	0.10	2	5	0.50	...1..11	....111.	.......!	....
3684 Berry	13.40	0.0504	0.011	12.36	1.2	0.10	2	2	0.25	11	...1.1..	.1.....1	....
3685 1981 EH14	13.40	0.0747	0.013	10.16	0.8	0.10	2	3	0.22	11	...111..	.1.....1	....
3686 1987 EB	12.00	0.0973	0.009	16.96	0.8	0.10	6	11	0.55	...1..11	....111.	.1.....1	....
3687 Dzus	11.70	0.0452	0.008	28.58	2.2	0.95	3	7	0.60	...1..11	....111.	.1.....1	....
3694 Sharon	10.50	0.0545	0.010	45.24	3.6	0.50	4	10	0.67	...1..11	....111.	.1.....1	....
3702 Trubetskaya	11.60	0.1369	0.014	17.19	0.8	0.10	2	5	1.00	...1..11	....111.	.1.....1	....
3708 1974 FV1	9.20	0.0609	0.010	77.85	5.6	0.10	2	3	0.67	...1..11	.....11.	.1.....1	....
3709 Polypoites	9.10	0.0413	0.016	99.02	15.1	1.00	4	11	1.00	...1..11	....111.	.11....1	....
3714 Kenrussell	12.90	0.0986	0.021	11.14	1.0	0.10	2	2	0.40	1	.....1..	.1.....1	....
3724 1979 YN8	11.50	0.2206	0.047	14.19	1.3	0.10	2	3	1.00	...1...1	.....11.	.11....1	....
3728 1983 QF	11.60	0.1062	0.021	19.52	1.7	0.54	4	12	0.67	11	....111.	.11....1	...1....
3730 Hurban	12.00	0.0404	0.006	26.34	1.8	0.10	1	2	0.50	...1..11	....1.1.	.1..1..1	....
3731 1984 DH1	10.30	0.0552	0.004	49.28	1.8	0.10	2	6	1.00	...1..11	....111.	1	....
3744 Horn-d'Arturo	12.70	0.0591	0.004	15.76	0.5	0.10	7	16	0.88	...1..11	....111.	.1.....1	....
3747 Belinskij	11.10	0.0898	0.011	26.73	1.4	0.10	3	7	0.75	...1..11	....111.	.1.....1	....
3751 Kiang	11.80	0.0726	0.008	21.54	1.1	0.10	4	7	0.67	...1..11	....111.	.1.....1	....
3754 1931 FM	10.10	0.0570	0.004	53.17	1.8	0.10	8	17	1.00	...1..11	....111.	....11.1	1.......
3759 Piironen	11.90	0.0297	0.002	32.15	1.0	0.10	2	6	1.00	...1...1	....111.	1	....
3776 1938 GG	10.20	0.2642	0.038	23.58	1.5	0.10	5	6	1.00	...1...1	....111.	.11....1	....
3784 Chopin	11.00	0.0864	0.035	28.53	4.4	0.74	4	5	0.57	1..1..11	....11..	.11....1	....
3793 Leonteus	8.50	0.0939	0.020	86.54	7.9	0.66	7	14	0.88	...1..11	.....11.	.1.....1	....
3803 1981 TP1	11.20	0.0465	0.003	35.47	1.2	0.10	4	10	1.00	...1..11	....111.	1	....
3812 1965 AK1	12.10	0.0221	0.004	34.03	2.9	0.65	8	18	1.00	...1...1	....111.	.11...11	....
3815 Konig	12.20	0.0431	0.005	23.24	1.1	0.10	2	5	0.50	...1..11	....111.	.1..1..1	....
3818 1979 QL8	14.30	0.0325	0.007	10.18	0.9	0.10	2	2	0.33	...1...1	.....1..	.1.....1	....
3829 1988 EM	12.20	0.0393	0.004	24.33	1.1	0.10	3	7	1.00	...1..11	....111.	.1..1..1	....
3855 Pasasymphonia	13.10	0.2569	0.030	6.29	0.3	0.10	3	5	0.43	...1..11	....11..	.1.....1	....
3872 1383 AV	12.80	0.0583	0.011	15.16	1.3	0.55	6	13	0.86	...1...1	....111.	.11...11	....
3895 1987 DE	12.50	0.1466	0.024	10.98	0.8	0.19	6	9	0.67	...1..11	....111.	.11....1	....
3899 1982 SN1	11.30	0.0949	0.016	23.71	1.8	0.10	2	2	1.00	...1..11	....11..	.1.....1	....
3901 1958 GQ	12.40	0.0459	0.012	20.54	2.3	0.31	2	3	0.50	...1..11	.....11.	.11....1	....
3902 1986 AL	11.40	0.0631	0.006	27.78	1.2	0.10	5	8	0.71	...1..11	....111.	.1.....1	....
3906 1987 KE1	10.90	0.0348	0.002	47.07	1.1	0.10	6	18	1.00	...1..11	....111.	1	....
3915 Fukushima	12.20	0.0561	0.010	20.38	1.6	0.44	3	9	1.00	...1..11	....111.	.11....1	....
3916 1981 QA3	12.10	0.0530	0.006	21.96	1.1	0.10	6	9	0.60	1..1..11	....11..	.1.....1	...1....
3922 1971 SP3	12.60	0.0400	0.009	20.08	1.9	0.10	1	2	0.50	1	.....11.	.1.....1	....
3925 1977 SS2	10.80	0.0482	0.002	41.89	1.0	0.10	3	9	1.00	...1..11	....111.	....	....
3932 1984 SC5	12.00	0.1859	0.045	12.27	1.3	0.10	2	2	0.29	1	...1.1..	.1.....1	....
3935 Toatenmongakkai	12.10	0.1962	0.035	11.41	0.9	0.10	1	2	0.20	11	...111..	.1.....1	....
3939 Huruhata	11.40	0.0524	0.006	30.46	1.7	0.10	2	6	1.00	...1..11	....111.	.1.....1	....
3945 1982 PL	12.10	0.0474	0.008	23.21	1.7	0.10	1	3	1.00	...1..11	....111.	.1.....1	....
3957 1933 OD	12.40	0.0352	0.007	23.47	2.1	0.10	2	3	1.00	1	.....11.	.1..1..1	....
3961 1962 OB	12.10	0.2120	0.037	10.97	0.8	0.10	2	3	0.22	1..1..11	...111..	.1.....1	....

IMPS Albedos and Diameters

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
3967	1976 YW2	11.20	0.0702	0.011	28.86	2.1	0.10	1	3	0.50	...1..11	....111.	.1.....1	....
3970	1979 ME9	12.40	0.1117	0.020	13.17	1.0	0.10	2	2	0.22	11	...111..	.1.....1	....
3971	1979 YM8	11.80	0.0392	0.006	29.32	2.1	0.52	5	15	0.83	...1..11	....111.	..1....1	....
3976	1983 JM	11.50	0.0644	0.006	26.25	1.1	0.10	8	17	1.00	...1..11	....111.	.1.....1	....
3978	1983 VP1	11.70	0.0518	0.005	26.70	1.2	0.10	3	8	0.60	...1..11	....111.	.1.....1	...1....
3979	1983 VV1	11.70	0.1003	0.016	19.19	1.4	0.10	3	4	0.75	...1...1	....11..	.1.....1	...1....
3981	1984 BL	11.90	0.0603	0.020	22.56	3.0	0.63	3	6	1.00	11	....111.	.11....1	....
3983	1984 SX	12.30	0.0789	0.008	16.41	0.8	0.10	3	5	0.30	...1..11	...111..	.1.....1	...1....
3994	Ayashi	12.60	0.0855	0.011	13.73	0.8	0.10	3	6	0.43	...1...1	....11..	.1.....1	....
3999	1989 AL	12.40	0.0710	0.013	16.52	1.4	0.10	2	4	0.67	...1...1	....11..	.1.....1	....
4006	1972 YR	12.60	0.0611	0.012	16.24	1.4	0.10	2	2	0.33	1..1...1	.....1..	.1.....1	....
4009	1977 EN1	12.20	0.0712	0.018	18.08	1.9	0.10	1	2	0.10	1	...1.11.	.1.....1	...1....
4014	1979 SG10	11.90	0.0226	0.010	36.84	6.2	0.58	2	2	0.25	1..1...1	...1.1..	.11....1	....
4035	1986 WD	9.10	0.0860	0.015	68.59	5.4	0.33	6	12	0.86	...1..11	....111.	.11....1	....
4049	1973 QD2	11.90	0.0786	0.009	19.77	1.0	0.10	4	9	0.67	...1..11	....111.	.1.....1	....
4060	Deipylos	9.20	0.0592	0.007	78.99	4.3	0.10	4	7	0.80	...1..11	.....11.	.1.....1	....
4061	Martelli	11.80	0.0930	0.018	19.03	1.6	0.10	1	2	0.08	11	...111..	.1..1..1	...1....
4063	Euforbo	9.00	0.0425	0.004	102.18	4.0	0.10	6	12	1.00	...1..11	....111.	.1.....1	....
4068	Menestheus	9.50	0.0721	0.014	62.31	5.3	0.10	1	2	0.20	1	...1.11.	.1.....1	....
4086	1985 VK2	9.10	0.0536	0.014	86.89	9.4	1.00	7	17	0.78	...1..11	....111.	.11....1	....
4093	Bennett	11.90	0.0601	0.016	22.60	2.6	0.33	3	4	0.75	...1...1	....11..	.11....1	....
4103	Chahine	11.30	0.3204	0.026	12.91	0.5	0.10	5	7	1.00	...1..11	....11..	.1.....1	....
4107	Rufino	11.70	0.2931	0.043	11.22	0.7	0.10	2	4	1.00	...1..11	....11..	.1..1..1	...1....
4110	Keats	11.60	0.0633	0.009	25.29	1.7	0.10	2	4	0.67	...1..11	....111.	.1.....1	....
4112	1981 ST	11.20	0.0248	0.002	48.62	1.9	0.10	4	10	1.00	...1...1	....111.	1	..11....
4121	Carlin	12.60	0.3544	0.074	6.74	0.6	0.10	1	2	0.11	1	...111..	.1.....1	....
4124	1986 SE	12.60	0.0413	0.011	19.75	2.2	0.10	1	2	0.25	...1...1	...1.11.	.1.....1	....
4132	Bartok	11.80	0.3050	0.037	10.51	0.6	0.10	2	4	1.00	...1..11	....11..	.1.....1	....
4140	1976 VA	11.20	0.0485	0.004	34.73	1.5	0.10	4	7	1.00	...1..11	....111.	.1..1..1	....
4141	1978 PG3	12.60	0.0723	0.015	14.93	1.3	0.10	1	2	1.00	...1...1	....11..	.1..1..1	...1....
4144	1981 SW6	11.50	0.0729	0.012	24.68	1.8	0.10	2	3	0.50	...1..11	.....11.	.1..1..1	....
4152	Weber	12.10	0.0767	0.017	18.25	1.7	0.10	2	2	1.00	...1...1	.....1..	.1.....1	....
4157	Izu	11.90	0.0695	0.008	21.01	1.1	0.10	3	5	0.50	...1..11	....111.	.1.....1	....
4159	1989 GK	10.80	0.2822	0.036	17.31	1.0	0.10	3	5	0.75	...1..11	....111.	.1.....1	....
4162	1940 WA	11.60	0.0742	0.009	23.36	1.3	0.10	2	6	1.00	...1..11	....111.	1	...1....
4169	Celsius	10.90	0.0705	0.018	33.09	3.6	0.93	4	11	1.00	...1..11	....111.	.11....1	....
4176	1987 DS	11.70	0.0409	0.009	30.03	2.8	0.10	2	2	0.40	...1...1	.....1..	.1..11.1	1.......
4186	1977 DT1	11.50	0.0600	0.013	27.19	2.6	0.24	5	6	0.63	...1..11	.....11.	.11....1	....
4192	1981 DH	11.50	0.0728	0.021	24.70	2.9	0.74	6	14	0.86	...1..11	....111.	.11....1	....
4194	1982 RE	12.10	0.0752	0.014	18.43	1.5	0.10	2	2	1.00	...1..11	.....1..	.1..1..1	...1....
4201	1984 JA1	11.00	0.0794	0.034	29.77	4.9	0.69	4	5	1.00	1..1..11	....111.	.11....1	....
4209	1986 TG4	10.80	0.1288	0.026	25.63	2.3	0.10	2	2	0.50	1	.....1..	.1.....1	....
4211	1987 RT	11.90	0.0311	0.005	31.40	2.4	0.10	2	2	0.33	1	.....1..	.1.....1	....
4222	Nancita	12.20	0.3191	0.071	8.54	0.8	0.78	5	11	1.00	...1..11	....111.	.1..1..1	...1....
4224	Susa	11.00	0.0592	0.006	34.47	1.5	0.10	9	16	0.90	...1..11	....111.	.1.....1	...1....
4226	Damiaan	11.60	0.0423	0.010	30.95	3.2	0.40	4	8	1.00	...1...1	....111.	.11....1	....
4230	1973 ST1	11.90	0.0216	0.004	37.73	2.9	0.10	2	3	1.00	...1...1	.....11.	.1.....1	....
4231	1976 WD	13.10	0.0573	0.015	13.32	1.4	0.10	1	2	0.50	1......1	....1.1.	.1.....1	....
4236	1979 FV1	11.30	0.0498	0.007	32.73	2.1	0.10	2	4	1.00	...1..11	....111.	.1..1..1	....
4243	1981 GF1	12.50	0.0540	0.011	18.09	1.6	0.10	1	2	0.25	1	...1.11.	.1.....1	....

IMPS Albedos and Diameters

ID/1 Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
											1111111	11122222	22222333
										12345678	90123456	78901234	56789012
4250 Perun	11.90	0.0795	0.016	19.65	1.7	0.10	1	2	0.17	1	...111..	.1.....1	....
4292 Aoba	11.90	0.0506	0.009	24.63	2.0	0.10	2	2	0.40	...1..11	.....1..	.1..1..1	...1....
4298 1941 WA	12.20	0.0651	0.010	18.91	1.3	0.10	1	3	0.14	...1..11	...1111.	.1.....1	....
4313 1979 HK1	12.80	0.0335	0.007	20.00	1.8	0.20	3	4	0.50	...1...1	....111.	.1.....1	....
4315 1979 SL11	12.40	0.0513	0.010	19.43	1.6	0.48	7	15	1.00	...1..11	....111.	.11....1	....
4317 1980 DA1	10.30	0.0546	0.011	49.54	4.2	0.10	1	2	0.20	11	...1.11.	.1.....1	....
4327 1982 KB1	12.70	0.0678	0.013	14.72	1.3	0.54	8	14	1.00	...1..11	....111.	.11....1	....
4332 1983 RC	11.90	0.2306	0.028	11.54	0.6	0.10	2	5	0.33	...1..11	....111.	.1.....1	....
4335 Verona	13.50	0.2634	0.045	5.17	0.4	0.10	2	3	0.17	...1...1	...111..	.1.....1	...1....
4342 Freud	12.30	0.0769	0.012	16.62	1.2	0.10	3	4	0.60	...1..11	....11..	.1.....1	...1....
4343 1988 AC	11.80	0.0936	0.007	18.97	0.7	0.10	7	13	0.70	...1..11	....111.	.1.....1	...1....
4349 Tiburcio	11.80	0.0493	0.007	26.12	1.8	0.10	2	4	0.67	...1..11	....111.	.1.....1	....
4356 9522 P-L	13.10	0.0665	0.011	12.36	0.9	0.10	1	2	0.17	...1..11	...111..	.1.....1	....
4366 1979 YV8	12.20	0.0249	0.005	30.60	2.8	0.10	1	2	0.25	1	...1.11.	.1.....1	....
4368 1981 JC2	11.40	0.1115	0.025	20.89	2.0	0.10	2	2	0.50	...1..11	.....1..	.1.....1	....
4378 Voigt	10.80	0.5290	0.094	12.64	1.0	1.00	4	7	0.80	...1..11	....11..	.1.....1	....
4379 1988 PT1	11.80	0.0564	0.004	24.44	0.9	0.10	6	13	1.00	...1..11	....111.	.1.....1	...1....
4381 Uenohara	11.40	0.1166	0.019	20.43	1.5	0.10	3	3	0.50	...1..11	.....1..	.1.....1	....
4414 4153 P-L	14.00	0.0304	0.006	12.09	1.0	0.10	2	2	0.67	...1...1	.....1..	.1.....1	....
4424 1967 DB	11.50	0.0709	0.016	25.01	2.4	0.84	4	7	0.80	...1..11	....111.	.11....1	....
4431 1978 WU14	11.20	0.0707	0.007	28.76	1.3	0.10	7	17	1.00	...1..11	....111.	.11....1	....
4436 1983 EX	11.10	0.0680	0.008	30.71	1.6	0.10	5	7	1.00	...1..11	.....11.	.1.....1	....
4438 1983 WR	11.40	0.0786	0.009	24.89	1.3	0.10	2	6	1.00	...1..11	....111.	.1.....1	....
4442 1985 RB1	12.40	0.0894	0.028	14.72	1.9	0.70	5	6	0.71	1..1..11	....11..	.11....1	....
4449 1987 RX3	11.20	0.0649	0.010	30.02	2.0	0.10	3	5	0.75	11	....111.	.1.....1	....
4460 Bihoro	10.80	0.0532	0.007	39.88	2.4	0.10	2	4	1.00	11	....111.	1	....
4470 1978 QP1	12.00	0.0834	0.031	18.33	2.7	0.35	2	2	0.33	1	.....1..	.11.1.11	...1....
4484 1987 DD	12.20	0.0513	0.006	21.30	1.2	0.10	3	4	1.00	...1..11	.....11.	.1.....1	....
4489 1988 AK	9.00	0.0514	0.009	92.93	7.4	0.39	7	14	1.00	...1..11	....111.	.11....1	....
4490 Bambery	12.70	0.2156	0.024	8.26	0.4	0.10	4	7	0.50	11	....11..	.1.....1	....
4493 1988 TG1	11.00	0.1636	0.019	20.74	1.1	0.10	3	6	0.75	...1..11	....111.	.1.....1	...1....
4500 1989 CL	12.00	0.0813	0.016	18.56	1.6	0.10	2	2	0.29	...1...1	...1.1..	.1..1..1	...1....
4505 1990 DV1	11.30	0.1435	0.028	19.28	1.6	0.10	2	3	1.00	1..1...1	.....11.	.1..1..1	...1....
4511 1935 SP1	12.10	0.3101	0.070	9.08	0.9	0.10	2	2	0.20	...1...1	...111..	.1.....1	....
4522 Britastra	11.60	0.0827	0.007	22.12	0.9	0.10	3	7	1.00	...1..11	....111.	.1..1..1	..11....
4543 1989 CQ1	9.80	0.0540	0.011	62.75	5.7	0.10	1	2	0.20	...1...1	...1.11.	.1.....1	....
4547 1990 KP	11.20	0.0992	0.027	24.29	2.8	0.98	6	15	1.00	...1.111	....111.	.11....1	....
4554 1986 UT	11.30	0.0888	0.015	24.51	1.8	0.10	3	3	0.75	...1...1	.....1..	.1.....1	....
4562 1979 UD2	13.00	0.0473	0.007	15.36	1.0	0.10	3	6	0.43	...1..11	....111.	.1.....1	...1....
4573 1986 TP6	11.60	0.0674	0.011	24.50	1.8	0.10	1	2	0.33	...1..11	....11..	.1.....1	....
4597 1983 UA1	12.10	0.0824	0.023	17.60	2.0	0.10	1	2	0.17	1	...111..	.11....1	....
4609 1988 CT3	11.50	0.0582	0.009	27.62	2.0	0.10	2	4	0.40	...1...1	....111.	.1.....1	....
4617 1976 DK	11.20	0.0696	0.010	29.00	1.9	0.10	3	4	0.33	...1..11	....11..	.1.....1	...1....
4645 1990 SP4	12.40	0.1136	0.022	13.06	1.1	0.10	2	2	0.33	11	.....1..	.1..1..1	...1....
4648 1931 UE	13.00	0.0734	0.010	12.32	0.8	0.10	3	4	0.60	...1..11	....111.	.1.....1	..11....
4663 1984 SM1	11.80	0.0406	0.004	28.81	1.4	0.10	5	8	0.71	...1...1	....111.	.1.....1	....
4672 1988 HB	10.70	0.0729	0.009	35.66	1.9	0.10	4	5	0.80	...1..11	....11..	.1..1..1	1111....

IMPS Albedos and Diameters

ID/2	Name		H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												12345678	1111111 90123456	11122222 78901234	22222333 56789012
31	40GO	57GC	11.50	0.0560	0.008	28.15	1.8	0.50	4	11	0.67	1..1..11	....111.	1	....
114	72HL	5059T2	12.28	0.0532	0.006	20.17	1.1	0.15	4	8	0.67	...1..11	....111.	.1.....1	...1....
158	74QU1	83YC	13.22	0.0639	0.011	11.93	0.9	0.10	1	2	0.50	...1..11	.....11.	.1.....1	....
175	75DB	79BN	12.40	0.0709	0.009	16.54	1.0	0.10	3	5	1.00	...1..11	....11..	.1.....1	...1....
237	76WC1	68HD1	12.40	0.0821	0.014	15.36	1.2	0.10	2	3	0.50	...1..11	....11..	.1.....1	....
247	77DL3	72XZ	14.40	0.0580	0.013	7.28	0.7	0.10	2	2	1.00	...1..11	....11..	.1..1..1	....
268	77PO1	86XN3	10.40	0.1046	0.020	34.19	2.9	0.10	2	2	0.50	1	.....1..	.1.....1	....
287	77RR7	81JN1	12.35	0.0226	0.003	29.99	1.8	0.10	1	3	0.50	...1...1	....111.	.1.....1	....
292	77TS3	77VN1	11.90	0.0909	0.019	18.38	1.7	0.10	2	2	0.67	...1...1	.....1..	.1.....1	....
300	78NN1	83PD	13.50	0.0281	0.003	15.83	0.9	0.10	2	4	0.50	...1...1	....111.	.1.....1	....
338	78SS2	82HA1	11.72	0.0883	0.010	20.26	1.1	0.10	5	10	0.71	...1..11	....111.	.11....1	....
388	78VG10	77RO1	12.10	0.1050	0.019	15.60	1.2	0.10	2	3	0.50	...1...1	....11..	.1.....1	....
402	79FA3	90HJ1	11.40	0.0950	0.013	22.64	1.4	0.10	6	6	1.00	...1..11	....11..	.11....1	....
409	79KO	71BC1	11.40	0.0311	0.006	39.55	3.5	0.10	1	2	0.20	1	...1.11.	.1.....1	....
443	79PA	87OU	14.70	0.0253	0.008	9.59	1.2	0.62	3	5	0.23	1	...111..	.11.1..1	...1....
466	79TA	79QK9	14.02	0.0639	0.008	8.26	0.5	0.12	5	8	0.71	...1..11	....11..	.1.....1	...1....
479	79YQ		13.49	0.0350	0.003	14.25	0.6	0.10	8	19	0.73	...1..11	....111.	.1.....1	...1....
490	80FJ1	76SD10	11.73	0.0608	0.008	24.31	1.5	0.10	2	3	1.00	...1..11	.....11.	.1..1..1	....
493	80FR1	83VC1	12.40	0.0821	0.018	15.36	1.5	0.10	2	2	0.29	1	...1.1..	.1.....1	....
513	80PB3	90FO	10.90	0.0916	0.009	29.02	1.3	0.10	7	13	0.88	...1..11	....111.	.1.....1	...1....
536	80TB12	80VM	11.90	0.0438	0.009	26.47	2.4	0.10	1	2	0.25	1	...1.11.	.1.....1	....
537	80TL13	78LP	10.87	0.1639	0.014	22.00	0.9	0.10	6	9	1.00	...1..11	....11..	.1..1..1	..11....
544	80XZ	32BE	11.06	0.1059	0.020	25.07	2.1	0.10	2	2	0.33	...1..11	.....11.	.1.....1	....
563	81EN	81EG35	14.40	0.0212	0.011	12.05	2.3	0.57	2	2	0.40	1..1...1	.....1..	.11....1	...1....
621	81EZ10		13.90	0.0205	0.004	15.41	1.4	0.10	2	2	0.40	...1...1	.....1..	.1.....1	....
800	81EO34	87SO1	13.72	0.0617	0.012	9.65	0.8	0.10	2	2	0.40	...1..11	.....1..	.1.....1	...1....
877	B203	81JG	11.48	0.0509	0.004	29.79	1.0	0.10	4	12	1.00	...1..11	....111.	.1.....1	....
957	B434	82FJ	11.40	0.0708	0.012	26.21	1.9	0.10	3	4	0.33	...1..11	....111.	.1.....1	....
966	82JR1	83VG1	13.50	0.0466	0.006	12.29	0.7	0.10	2	6	0.29	1..1..11	...1111.	.11....1	...1....
1012	82UW3	79CB	10.90	0.2151	0.031	18.94	1.2	0.10	2	4	1.00	...1..11	....11..	.1.....1	....
1052	83AH1	87AA	13.90	0.0380	0.009	11.32	1.1	0.10	1	2	0.20	1	...111..	.1.....1	....
1054	83AO2	50CD	11.40	0.0501	0.007	31.16	1.9	0.77	7	17	1.00	...1..11	....111.	.1..1..1	....
1062	T92	83CF1	10.90	0.0820	0.015	30.66	2.4	0.10	1	2	0.33	...1..11	.....11.	.1.....1	....
1067	E1	83EV	12.50	0.0721	0.015	15.65	1.4	0.10	2	2	0.29	...1...1	...1.1..	.1.....1	....
1071	T121	83HJ	11.92	0.0612	0.028	22.20	3.8	0.91	4	7	0.44	...1..11	....111.	.11....1	....
1076	B694	83NL	12.90	0.1567	0.027	8.83	0.7	0.10	3	3	0.38	...1..11	....11..	.1.....1	....
1084	83QG	79YL9	13.40	0.0650	0.016	10.89	1.1	0.96	8	17	0.89	1..1.111	....111.	.11....1	....
1097	83RQ4	87SR	13.04	0.0522	0.008	14.35	1.0	0.10	2	4	0.67	...1..11	....111.	.1.....1	....
1105	B778	83TS1	12.40	0.0551	0.011	18.76	1.6	0.10	2	3	0.50	11	....111.	.1.....1	....
1106	B779	83TW1	13.25	0.0523	0.010	13.02	1.1	0.10	2	3	0.50	...1...1	....11..	.1.....1	....
1108	T165	83TR2	12.10	0.0604	0.005	20.57	0.8	0.10	5	12	1.00	...1..11	....111.	.1.....1	....
1110	83VA		16.40	0.0668	0.006	2.70	0.1	0.10	2	4	0.25	11	...1111.	.1.....1	....
1119	83WF1		11.90	0.1664	0.027	13.59	1.0	0.10	2	3	1.00	...1..11	....11..	.1.....1	....
1124	83XX	79SF12	13.40	0.0746	0.010	10.17	0.6	0.10	2	3	0.50	...1..11	....11..	.1..1..1	....
1150	84HE1	69RZ	11.73	0.0315	0.004	33.76	2.2	0.10	4	5	1.00	...1...1	.....11.	.1.....1	....
1179	B919	84UT	12.90	0.0221	0.006	23.50	2.6	0.10	1	2	0.17	...1...1	...1.11.	.1.....1	....
1185	B934	84UX2	12.60	0.0428	0.008	19.41	1.5	0.10	2	3	0.33	1..1...1	....111.	.1.....1	...1....
1293	85VP	73SL3	11.46	0.0565	0.010	28.54	2.2	0.10	3	3	0.43	...1..11	.....1..	.1.....1	...1....
1375	86RD1	39PB	12.31	0.0631	0.016	18.26	1.9	0.10	1	2	0.25	1	...111..	.1..1..1	...1....
1409	B1536	86TM1	12.59	0.0882	0.021	13.58	1.4	0.10	2	2	0.20	1	...1.1..	.1.....1	...1....

IMPS Albedos and Diameters

ID/2	Name		H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												12345678	1111111 90123456	11122222 78901234	22222333 56789012
1417	86TS6	89BX	9.87	0.0596	0.012	57.79	4.9	0.10	2	2	0.40	1	.....1..	.1.....1	....
1426	86UM1	54UC2	12.40	0.0569	0.007	18.46	1.1	0.10	3	6	0.75	11	....111.	.1.....1	....
1430	86VT	75VY2	11.40	0.0413	0.013	34.33	4.4	0.10	1	2	0.25	1......1	...111..	.11....1	....
1454	87DG6	57HX	13.40	0.0299	0.007	16.07	1.7	0.10	1	2	0.17	1	...1.11.	.1.....1	....
1471	87MK	78PU4	12.90	0.1427	0.038	9.26	1.0	0.19	2	2	0.33	1	.....1..	.1.....1	....
1518	B1735	87ST1	12.40	0.0372	0.006	22.83	1.7	0.10	2	3	0.50	...1..11	....11..	.1..1..1	....
1587	88BK	62XH	12.13	0.0507	0.007	22.13	1.3	0.27	5	7	1.00	...1..11	....111.	.1.....1	....
1668	88PP	78EA1	11.90	0.0991	0.019	17.60	1.5	0.10	2	2	0.29	...1..11	...1.1..	.1.....1	....
1672	88PH1		10.90	0.0572	0.006	36.72	1.7	0.10	1	3	1.00	...1..11	....111.	....1..1	...1....
1681	88QD1	51LO	13.00	0.0725	0.015	12.40	1.1	1.00	5	9	0.83	...1..11	....111.	.1.....1	....
1699	88RN4	83EQ	12.90	0.0916	0.023	11.55	1.2	0.10	1	2	0.50	1	....11..	.1.....1	....
1721	U282	88RX11	12.20	0.0188	0.004	35.19	3.2	0.10	1	2	0.25	1	...1.11.	.1.....1	....
1752	88TU2	54UM1	9.01	0.0674	0.008	80.78	4.3	0.10	2	3	1.00	...1..11	.....11.	.1.....1	....
1804	89AU	35YH	11.90	0.1111	0.010	16.63	0.7	0.10	3	9	1.00	11	....111.	1	....
1810	89AL2	75XN5	9.40	0.0418	0.008	85.69	7.4	0.10	1	2	0.50	1..1...1	.....11.	1	....
1811	89AM2	75XX3	9.40	0.0408	0.004	86.73	3.8	0.10	4	8	1.00	...1..11	.....11.	.1.....1	....
1822	89BT	78TP5	11.40	0.1178	0.016	20.32	1.2	0.25	2	5	1.00	...1..11	....111.	.1..1..1	...1....
1836	89CK1	86XM	9.40	0.0668	0.010	67.80	4.7	0.10	3	4	1.00	1..1..11	.....11.	.1.....1	....
1846	89CL3	73TT	12.50	0.1161	0.022	12.34	1.0	0.10	3	3	0.60	...1...1	.....1..	.1.....1	....
1852	89DJ	77EH2	9.40	0.0553	0.011	74.53	6.2	0.94	5	9	0.83	...1..11	.....11.	.1.....1	....
1897	89ME	78QM	11.52	0.0745	0.026	24.18	3.3	0.49	2	3	0.50	...1...1	....11..	.11....1	....
1904	89NB1	49MG	11.07	0.1664	0.025	19.91	1.4	0.10	4	4	0.67	...1..11	.....1..	.1..1..1	...1....
1914	89QE	31EN	10.76	0.1058	0.008	28.80	1.0	0.10	10	22	1.00	...1..11	....111.	.1.....1	....
1925	89RB2	50DC	12.90	0.0503	0.005	15.59	0.8	0.10	5	10	0.83	...1..11	....111.	.1.....1	....
1970	89UY	55XF	11.76	0.0452	0.019	27.81	4.5	0.99	3	4	0.60	...1..11	....11..	.11....1	....
1991	89UK8	31UL	11.40	0.0763	0.013	25.26	1.9	0.10	2	4	0.67	...1..11	....111.	.1.....1	....
1995	89VM	71QD1	11.40	0.0589	0.005	28.75	1.2	0.10	4	10	0.67	...1..11	....111.	.1.....1	....
2002	89VC2	89TG2	12.40	0.0384	0.007	22.46	1.8	0.10	2	2	0.33	...1...1	.....1..	.1.....1	....
2011	89WX	31VB1	10.90	0.2345	0.034	18.14	1.2	0.10	4	5	1.00	...1..11	....11..	.1.....1	....
2063	90BQ1	51RD2	11.40	0.3146	0.059	12.44	1.0	0.10	2	2	0.50	1	.....1..	.1.....1	....
2079	90DR4	A08BH	11.40	0.0726	0.009	25.89	1.5	0.10	2	4	1.00	...1..11	....111.	.1..1..1	....
2088	90FT	78CF	10.77	0.1382	0.036	25.08	2.7	0.10	1	2	0.33	1	....11..	.1.....1	....
2098	90HF1	83ET2	10.40	0.1526	0.030	28.30	2.4	0.10	1	2	0.50	11	.....11.	.1.....1	....
2105	90KB1	52PA	12.90	0.2245	0.049	7.38	0.7	0.10	2	2	0.29	11	...1.1..	.1.....1	...1....
2134	90PA	83EB3	11.50	0.0697	0.015	25.23	2.3	0.10	2	2	0.29	...1...1	...1.1..	.1.....1	....
2192	90TG3	31BK	12.70	0.1805	0.050	9.02	1.0	0.10	1	2	0.09	1	...1.11.	.1.....1	....
2198	90UF	77EQ6	12.80	0.0199	0.003	25.96	1.8	0.10	2	3	0.25	1..1...1	...111..	.1.....1	....
2416	7618PL	72XR1	12.40	0.0403	0.005	21.94	1.3	0.10	3	5	0.60	...1..11	....111.	.1.....1	....

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Chapter 13

IMPS SINGLETON CATALOG (FP 103)

Edward F. Tedesco and Glenn J. Veeder

This catalog presents derived albedos and diameters, together with various other parameters useful for assessing their reliability, for all asteroids which have only one accepted sighting in a single band.

This catalog presents the derived parameters for 94 numbered asteroids and 26 type 2 asteroids having only a single accepted sighting in one band. The results are collated by asteroid in ascending numerical order for asteroid types 1 and 2. Catalog entries include: identification number, name (or provisional designation if un-named) for asteroid type 1 and provisional designation for asteroid type 2, absolute magnitude (H), the average albedo and its one-sigma uncertainty (p_H and σp_H), the average diameter and its one-sigma uncertainty (D and σ_D), the probability that the results were *influenced by light curve or aspect variations (PLC), the number of sightings used* (US), the number of values averaged (UO), the fraction of predicted sightings which were observed (FOR), and the 32-bit OR'd status word AStatW.

Note that the format of the catalog presented here differs from that of the machine-readable data base documented in Table 14, page 155 in the order of the fields and the substitution of the single status word, AStatW, for the pair of accepted and rejected status words, AccStW and RejStW. This was done to improve readability.

This catalog contains one record per asteroid. If an asteroid is not listed here, or in the preceding chapter [IMPS Albedos and Diameters Catalog (FP102)], that means it has no accepted sightings. In addition to albedos and diameters this catalog contains the uncertainties in each of these values, due solely to the measured uncertainties in the IRAS photometry, together with various other parameters useful for assessing the reliability of the adopted values.

See the preceding chapter for an explication of the AStatW status word.

IMPS Singleton Catalog

ID/1	Name	H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
155	Scylla	11.39	0.0309	0.007	39.88	3.8	0.00	1	1	0.20	..1....1	...1.1..	1	...1....
327	Columbia	10.10	0.2360	0.061	26.13	2.8	0.00	1	1	0.50	.1.1...1	.....1..	.1.....1	....
629	Bernardina	9.90	0.2140	0.034	30.09	2.1	0.00	1	1	1.00	11	.....1..	....1...	...1....
637	Chrysothemis	11.00	0.0633	0.016	33.34	3.6	0.00	1	1	0.33	.1.1...1	.....1..	.1.....1	....
794	Irenaea	11.10	0.0502	0.012	35.75	3.6	0.00	1	1	0.25	.1.1...1	...1.1..	.1.....1	...1....
815	Coppelia	10.70	0.2089	0.053	21.07	2.2	0.00	1	1	0.20	.1.....1	...1.1..	.1.....1	....
982	Franklina	9.90	0.1838	0.040	32.47	3.0	0.00	1	1	0.50	..1...11	.....1..	.1..1..1	....
999	Zachia	11.10	0.1994	0.051	17.94	1.9	0.00	1	1	1.00	.1.1...1	.....1..	.1.....1	....
1038	Tuckia	10.82	0.0244	0.006	58.28	6.0	0.00	1	1	0.33	..11...1	.....1..	.1.....1	....
1040	Klumpkea	10.90	0.0630	0.019	34.98	4.3	0.00	1	1	0.17	.1.1...1	...1.1..	.1.....1	....
1079	Mimosa	11.20	0.1367	0.044	20.69	2.7	0.00	1	1	0.13	.1.....1	...1.1..	.1.....1	....
1141	Bohmia	13.90	0.0540	0.018	9.49	1.2	0.00	1	1	0.11	11.....1	...1.1..	.1.....1	....
1162	Larissa	9.44	0.1485	0.040	44.64	5.0	0.00	1	1	1.00	.1.1...1	.....1..	.1..1..1	...1....
1253	Frisia	11.50	0.0657	0.016	25.98	2.7	0.00	1	1	0.50	.1.....1	.....1..	.1.....1	....
1287	Lorcia	11.07	0.1328	0.040	22.28	2.7	0.00	1	1	0.25	.1.....1	...1.1..	.1.....1	....
1321	Majuba	10.28	0.1439	0.038	30.80	3.4	0.00	1	1	0.25	.1.1...1	...1.1..	.1.....1	....
1352	Wawel	11.10	0.1491	0.034	20.75	2.0	0.00	1	1	0.17	..1....1	...1.1..	.1.....1	....
1398	Donnera	10.10	0.1913	0.055	29.03	3.5	0.00	1	1	0.17	.1.....1	...1.1..	.1..1..1	....
1410	Margret	11.10	0.1763	0.049	19.08	2.2	0.00	1	1	0.50	.1.....1	.....1..	.1.....1	....
1571	Cesco	11.50	0.0530	0.015	28.93	3.5	0.00	1	1	0.20	.1.....1	...1.1..	.1.....1	....
1575	Winifred	12.30	0.2452	0.064	9.31	1.0	0.00	1	1	0.13	..1....1	...1.1..	.1.....1	....
1586	Thiele	11.90	0.1575	0.039	13.96	1.5	0.00	1	1	0.50	.1.....1	.....1..	.1.....1	...1....
1591	Baize	11.70	0.1056	0.026	18.70	1.9	0.00	1	1	0.50	.1.1...1	.....1..	.1.....1	....
1624	Rabe	11.20	0.1028	0.027	23.86	2.6	0.00	1	1	0.50	.1.1...1	.....1..	.1.....1	....
1701	Okavango	10.30	0.2141	0.058	25.02	2.8	0.00	1	1	0.50	.1.1...1	.....1..	.1..1..1	....
1714	Sy	11.90	0.1088	0.027	16.80	1.7	0.00	1	1	0.20	.1.....1	...1.1..	.1.....1	....
1737	Severny	10.80	0.1811	0.057	21.61	2.7	0.00	1	1	0.25	.1.1...1	...1.1..	.1.....1	....
1878	Hughes	11.50	0.1399	0.040	17.81	2.1	0.00	1	1	0.10	.1.....1	...1.1..	.1.....1	...1....
1903	Adzhimushkaj	10.50	0.0837	0.017	36.50	3.3	0.00	1	1	0.25	..11..11	...1.1..	....1..1	...1....
2039	Payne-Gaposchkin	12.80	0.0253	0.007	23.04	2.7	0.00	1	1	0.25	.1.....1	...1.1..	.1.....1	....
2054	Gawain	12.00	0.0697	0.017	20.05	2.1	0.00	1	1	0.25	.1.1...1	...1.1..	.1.....1	....
2066	Palala	12.50	0.0491	0.011	18.97	1.9	0.00	1	1	0.33	.1.1...1	.....1..	.1.....1	....
2111	Tselina	10.45	0.1938	0.054	24.54	2.8	0.00	1	1	0.33	.1.1...1	.....1..	.1.....1	....
2138	Swissair	12.00	0.1741	0.053	12.68	1.6	0.00	1	1	0.20	.1.....1	...1.1..	.1.....1	...1....
2183	1959 OB	11.50	0.0472	0.015	30.66	3.8	0.00	1	1	0.25	.1.....1	...1.1..	.1.....1	....
2192	Pyatigoriya	11.30	0.0535	0.012	31.59	3.1	0.00	1	1	0.20	1.1...1	...1.1..	.1.....1	....
2328	Robeson	12.50	0.1281	0.038	11.75	1.4	0.00	1	1	0.13	.1.....1	...1.1..	.1..1..1	...1....
2364	Seillier	10.70	0.2747	0.081	18.37	2.2	0.00	1	1	0.20	.1.1...1	...1.1..	.1.....1	....
2394	Nadeev	11.60	0.0209	0.006	44.01	5.0	0.00	1	1	0.17	.1.....1	...1.1..	.1..11.1	1.......
2450	Ioannisiani	11.30	0.0621	0.018	29.31	3.5	0.00	1	1	0.14	.1.....1	...1.1..	.1.....1	....
2453	A921 SA	11.20	0.0860	0.027	26.09	3.4	0.00	1	1	0.14	.1.....1	...1.1..	.1..1..1	1111....
2464	Nordenskiold	11.50	0.1496	0.037	17.22	1.8	0.00	1	1	0.50	.1.1...1	.....1..	.1.....1	....
2466	Golson	12.10	0.0611	0.018	20.45	2.5	0.00	1	1	0.25	.1.....1	...1.1..	.1.....1	....
2490	Bussolini	11.90	0.2268	0.059	11.64	1.3	0.00	1	1	0.33	.1.....1	.....1..	.1.....1	....
2523	1980 PV	11.50	0.1183	0.037	19.37	2.4	0.00	1	1	0.33	.1.....1	.....1..	.1.....1	....
2546	1950 FC	12.00	0.1188	0.034	15.35	1.8	0.00	1	1	0.33	.1.....1	.....1..	.1.....1	....
2562	Chaliapin	11.30	0.1232	0.030	20.81	2.2	0.00	1	1	0.25	.1.....1	...1.1..	.1.....1	....
2601	Bologna	11.20	0.1626	0.047	18.97	2.2	0.00	1	1	0.13	.1.....1	...1.1..	.1.....1	...1....
2604	Marshak	12.90	0.0552	0.017	14.88	1.8	0.00	1	1	0.13	11.1...1	...1.1..	.1.....1	....
2664	Everhart	13.80	0.0452	0.013	10.87	1.3	0.00	1	1	0.20	.1.....1	...1.1..	.1.....1	....

IMPS Singleton Catalog

ID/1	Name	H	p_V	σp_V	D	σ_D	PLC	US	UO	FOR	AStatW			
												1111111	11122222	22222333
											12345678	90123456	78901234	56789012
2739	1952 UZ1	13.20	0.0731	0.022	11.27	1.4	0.00	1	1	0.50	.1.....1	.....1..	.1.....1	...1....
2740	1974 SY4	11.70	0.0805	0.024	21.42	2.6	0.00	1	1	0.14	.1.1...1	...1.1..	.1.....1	...1....
2819	Ensor	12.20	0.1928	0.057	10.99	1.3	0.00	1	1	0.13	.1.....1	...1.1..	.1.....1	....
2849	Shklovskij	12.70	0.0642	0.017	15.13	1.7	0.00	1	1	0.14	.1.1...1	...1.1..	.1.....1	...1....
2909	Hoshi-No-Ie	10.90	0.1671	0.051	21.49	2.7	0.00	1	1	0.13	.1.....1	...1.1..	.1.....1	...1....
2952	Lilliputia	14.10	0.0505	0.015	8.96	1.1	0.00	1	1	0.50	..11...1	.....1..	.1.....1	....
2965	Surikov	13.60	0.0857	0.027	8.65	1.1	0.00	1	1	0.09	..1....1	...1.1..	.1..1..1	...1....
2979	Murmansk	12.10	0.0379	0.010	25.96	2.8	0.00	1	1	0.20	.1.....1	...1.1..	.1.....1	....
2989	1976 UF1	13.20	0.0595	0.016	12.48	1.4	0.00	1	1	0.50	.1.1...1	.....1..	.1.....1	...1....
3003	1983 YH	11.30	0.0852	0.020	25.03	2.5	0.00	1	1	1.00	.1.1...1	.....1..	.1.....1	....
3006	Livadia	13.50	0.0803	0.023	9.36	1.1	0.00	1	1	0.50	.1.1...1	.....1..	.1.....1	...1....
3026	1977 TA1	11.90	0.0986	0.029	17.65	2.2	0.00	1	1	0.50	.1.1...1	.....1..	.1..1..1	..11....
3027	Shavarsh	13.30	0.0585	0.018	12.02	1.5	0.00	1	1	0.50	1.1....1	.....1..	.1..1..1	....
3051	1974 YP	12.80	0.0752	0.023	13.35	1.7	0.00	1	1	0.25	.1.....1	...1.1..	.1.....1	...1....
3104	Durer	11.10	0.1858	0.053	18.58	2.2	0.00	1	1	0.13	.1.....1	...1.1..	.1.....1	....
3132	Landgraf	11.60	0.0564	0.016	26.78	3.1	0.00	1	1	0.25	.1.1...1	...1.1..	.1..1..1	1111....
3223	1942 RN	11.20	0.1365	0.038	20.70	2.4	0.00	1	1	0.17	.1.1...1	...1.1..	.1..1..1	....
3267	Glo	13.00	0.0607	0.011	13.56	1.1	0.00	1	1	0.09	1.1...11	...1.1..	.1.....1	....
3307	1981 DE1	13.80	0.0441	0.014	11.01	1.4	0.00	1	1	0.33	.1.....1	.....1..	.1.....1	....
3318	Blixen	11.00	0.1275	0.031	23.49	2.4	0.00	1	1	0.50	..11..11	.....1..	.1.....1	....
3326	1985 FL	12.70	0.0404	0.011	19.06	2.1	0.00	1	1	0.25	1	...1.1..	.1..1..1	....
3425	Hurukawa	10.80	0.1315	0.035	25.36	2.8	0.00	1	1	0.14	11	...1.1..	.1.....1	....
3467	Bernheim	13.00	0.0448	0.013	15.77	1.9	0.00	1	1	0.14	...1...1	...1.1..	.1.....1	....
3532	Tracie	12.00	0.0948	0.029	17.19	2.2	0.00	1	1	0.14	1	...1.1..	.1.....1	....
3587	1981 RK5	12.30	0.0610	0.019	18.67	2.4	0.00	1	1	0.13	...1...1	...1.1..	.1.....1	....
3630	1984 QN	12.80	0.0535	0.015	15.82	1.9	0.00	1	1	0.14	1	...1.1..	.1.....1	....
3772	Piaf	11.20	0.1062	0.030	23.47	2.8	0.00	1	1	0.33	1	.....1..	.1.....1	....
3781	1986 RG1	12.10	0.0578	0.015	21.02	2.3	0.00	1	1	0.08	11	...1.1..	.1.....1	...1....
3799	1979 SL9	11.70	0.1003	0.029	19.18	2.3	0.00	1	1	0.17	...1...1	...1.1..	.1.....1	....
3805	1981 DK3	12.40	0.1165	0.025	12.89	1.2	0.00	1	1	0.14	...1..11	...1.1..	.1.....1	...1....
3839	1971 OU	12.90	0.1378	0.045	9.42	1.2	0.00	1	1	0.17	1	...1.1..	.1.....1	....
3846	Hazel	12.10	0.0753	0.019	18.42	1.9	0.00	1	1	0.13	11	...1.1..	.1.....1	....
3876	Quaide	11.50	0.1111	0.031	19.99	2.3	0.00	1	1	0.09	1	...1.1..	.1..1..1	1.......
3911	1940 QB	11.40	0.1937	0.055	15.85	1.9	0.00	1	1	0.20	...1...1	...1.1..	.1.....1	....
3987	Wujek	12.20	0.0539	0.012	20.78	2.0	0.00	1	1	0.25	11	...1.1..	.1.....1	....
4002	1950 JB	11.90	0.2021	0.055	12.32	1.4	0.00	1	1	0.17	1	...1.1..	.1.....1	....
4131	Stasik	11.30	0.0501	0.009	32.64	2.7	0.00	1	1	0.50	...1..11	.....1..	.1.....1	....
4146	1982 DD2	13.70	0.0469	0.013	11.17	1.3	0.00	1	1	0.14	...1...1	...1.1..	.1.....1	....
4217	1988 BO2	12.50	0.2108	0.052	9.16	1.0	0.00	1	1	0.50	11	.....1..	.1..1..1	...1....
4266	1940 YE	11.90	0.0528	0.014	24.11	2.7	0.00	1	1	0.17	1	...1.1..	.1.....1	....
4281	Pounds	13.40	0.0361	0.011	14.61	1.8	0.00	1	1	0.17	1	...1.1..	.1.....1	....
4350	1989 UG1	12.00	0.0487	0.016	23.98	3.1	0.00	1	1	0.17	1..1...1	...1.1..	....1..1	1111....
4540	1988 VY1	11.90	0.1129	0.036	16.49	2.1	0.00	1	1	0.17	1......1	...1.1..	.1.....1	....
4642	1990 QG4	11.90	0.0628	0.018	22.11	2.6	0.00	1	1	0.13	...1...1	...1.1..	.1.....1	....

IMPS Singleton Catalog

ID/2	Name		H	p_H	σp_H	D	σ_D	PLC	US	UO	FOR	AStatW 12345678	 1111111 90123456	 11122222 78901234	 22222333 56789012
51	53UD	87SM	12.40	0.0908	0.026	14.60	1.7	0.00	1	1	0.17	1	...1.1..	.1.....1	....
219	76QE1	68DA1	10.90	0.1257	0.037	24.77	3.0	0.00	1	1	0.14	...1...1	...1.1..	.1.....1	....
263	77FN1	82DB1	11.76	0.0656	0.020	23.08	2.9	0.00	1	1	0.11	1	...1.1..	.1.....1	....
342	78SN4	49OR	11.90	0.1106	0.030	16.66	1.9	0.00	1	1	0.17	1	...1.1..	.1.....1	....
362	78TA7	76JR2	11.90	0.0925	0.025	18.22	2.1	0.00	1	1	0.25	...1...1	...1.1..	.1.....1	....
516	B91	80RU	12.80	0.0253	0.007	23.03	2.7	0.00	1	1	0.13	1	...1.1..	.1.....1	....
847	81EP42		14.53	0.0179	0.006	12.33	1.6	0.00	1	1	0.13	1	...1.1..	.1.....1	....
1072	T155	83HB1	11.46	0.0986	0.029	21.61	2.6	0.00	1	1	0.20	1	...1.1..	.1.....1	....
1078	B717	83OD	13.83	0.0847	0.026	7.83	1.0	0.00	1	1	0.11	1	...1.1..	.1.....1	....
1114	B797	83WG	12.90	0.0795	0.020	12.40	1.3	0.00	1	1	1.00	11	.....1..	.1.....1	...1....
1123	83XW	88PY1	12.35	0.1573	0.049	11.36	1.4	0.00	1	1	0.50	1	.....1..	.1..1..1	....
1125	83XH1	75BM1	12.90	0.0625	0.013	13.98	1.2	0.00	1	1	0.20	11	...1.1..	.1.....1	....
1252	85RU3	A11UF	12.40	0.0560	0.017	18.61	2.3	0.00	1	1	0.25	1......1	...1.1..	.1.....1	....
1365	86QN3	79MB1	14.40	0.0737	0.023	6.45	0.8	0.00	1	1	0.14	1......1	...1.1..	.1.....1	...1....
1444	86YA	75XJ2	10.49	0.1345	0.035	28.92	3.2	0.00	1	1	0.50	...1...1	.....1..	.1.....1	....
1453	87DE6	90QE1	12.02	0.0503	0.015	23.39	2.9	0.00	1	1	0.10	1..1...1	...1.1..	.1.....1	....
1500	87RJ	82BT10	13.75	0.0258	0.006	14.71	1.5	0.00	1	1	0.09	1......1	...1.1..	.1.....1	...1....
1601	88BK4	77DK	12.40	0.0268	0.007	26.87	3.0	0.00	1	1	0.17	1	...1.1..	.1.....1	....
1830	89CV	85QZ5	11.40	0.0348	0.008	37.41	3.5	0.00	1	1	0.20	1	...1.1..	.1.....1	....
1949	89TS	71VJ	12.90	0.0130	0.003	30.63	2.9	0.00	1	1	0.25	...1...1	...1.1..	.1.....1	....
1964	89UD	72TM1	11.80	0.1039	0.033	18.00	2.3	0.00	1	1	0.17	...1...1	...1.1..	.1.....1	....
2075	90DM1	73EH	13.40	0.0330	0.007	15.29	1.3	0.00	1	1	0.14	1......1	...1.1..	.1.....1	....
2214	90UF3	31AL	13.00	0.0587	0.017	13.78	1.6	0.00	1	1	0.20	1..1...1	...1.1..	.1.....1	....
2386	6564PL	71QH	12.30	0.0649	0.017	18.10	2.0	0.00	1	1	0.17	11	...1.1..	.1.....1	....
2404	6766PL	4243T3	11.92	0.0774	0.022	19.73	2.3	0.00	1	1	0.17	1	...1.1..	.1.....1	....
2585	3107T3	72VZ	11.90	0.0962	0.021	17.86	1.7	0.00	1	1	0.50	...1..11	.....1..	.1..1..1	....

Chapter 14

IMPS STATISTICS CATALOG (FP 104)

Glenn J. Veeder and Edward F. Tedesco

This catalog presents a summary of the number of times each asteroid was sighted, the number of times it was predicted to be scanned, and possible reasons for any failure to be detected. There is an entry for each of 4,679 numbered asteroids and 2,632 Type-2 asteroids (including those for which no IMPS sightings exist) collated by asteroid in ascending numerical order for types 1 and 2. Entries include: asteroid type, identification number, number of predicted sightings, number of accepted sightings, number of rejected sightings, number of missed predicted sightings, number of missed predicted faint sightings, number of dead 25 μm detector non-detections, number of noisy 25 μm detector non-detections, number of missed predictions in the galactic center region, and other non-detections.

The format of the machine-readable file is given in Table 15, page 156. Table 24 summarizes the parameters presented in this catalog. With the exception of the ID type (which is given in the column heading in the catalog below) the parameters, and the order in which they appear, are the same in the Catalog and Data Base versions.

This catalog includes entries for all asteroids considered by IMPS.

Table 24. IMPS Statistics Catalog

Parameter	Meaning
P	The number of times the asteroid was predicted to pass through the IRAS focal plane while the satellite was in survey mode.
S	The number of accepted sightings realized.
R	The number of potential sightings which were later rejected. Reasons for rejection are given in the IMPS Reject Catalog and Data Base (FP 105), *cf.*, Chapter 15.
M	The number of predicted sightings which were not realized. Reasons for missing these asteroids are given in the IMPS Missed-Predictions Catalog and Data Base (FP 106), *cf.*, Chapter 16.
F	Asteroids which, based upon *a priori* knowledge, were expected to be below the IRAS detection threshold.
D	Asteroid sightings which passed over the IRAS focal plane array but only over a dead 25 μm detector.
N	Asteroid sightings which passed over the IRAS focal plane array but only over a noisy 25 μm detector.
G	The number of sightings which passed within 10° of the galactic center.
X	The number of predicted sightings not realized due to a reason other than one of those noted above.

For example, P = 0 for the bright asteroids 9 Metis, 14 Irene, and 19 Fortuna meaning that these asteroids never passed through the scan pattern of the IRAS focal plane while the satellite was in survey mode.

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
1	6	6	0	0	0	0	0	0	0
2	10	7	3	0	0	0	0	0	0
3	9	8	1	0	0	0	0	0	0
4	2	1	1	0	0	0	0	0	0
5	3	3	0	0	0	0	0	0	0
6	9	7	1	1	0	1	0	0	0
7	7	6	1	0	0	0	0	0	0
8	7	7	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0
10	10	9	1	0	0	0	0	0	0
11	4	4	0	0	0	0	0	0	0
12	2	2	0	0	0	0	0	0	0
13	3	1	2	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0
15	7	7	0	0	0	0	0	0	0
16	11	11	0	0	0	0	0	0	0
17	4	4	0	0	0	0	0	0	0
18	6	5	0	1	0	0	0	0	1
19	0	0	0	0	0	0	0	0	0
20	3	3	0	0	0	0	0	0	0
21	5	5	0	0	0	0	0	0	0
22	8	4	0	4	0	2	1	0	1
23	6	6	0	0	0	0	0	0	0
24	2	0	0	2	0	1	1	0	0
25	8	8	0	0	0	0	0	0	0
26	7	7	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	8	7	1	0	0	0	0	0	0
29	5	4	1	0	0	0	0	0	0
30	8	5	3	0	0	0	0	0	0
31	8	7	1	0	0	0	0	0	0
32	12	9	2	1	0	1	0	0	0
33	0	0	0	0	0	0	0	0	0
34	7	7	0	0	0	0	0	0	0
35	2	2	0	0	0	0	0	0	0
36	3	2	1	0	0	0	0	0	0
37	8	8	0	0	0	0	0	0	0
38	9	9	0	0	0	0	0	0	0
39	3	3	0	0	0	0	0	0	0
40	7	7	0	0	0	0	0	0	0
41	3	3	0	0	0	0	0	0	0
42	3	2	1	0	0	0	0	0	0
43	1	1	0	0	0	0	0	0	0
44	6	6	0	0	0	0	0	0	0
45	7	7	0	0	0	0	0	0	0
46	3	3	0	0	0	0	0	0	0
47	8	7	1	0	0	0	0	0	0
48	6	4	2	0	0	0	0	0	0
49	3	2	1	0	0	0	0	0	0
50	1	1	0	0	0	0	0	0	0
51	6	6	0	0	0	0	0	0	0
52	7	7	0	0	0	0	0	0	0
53	6	4	2	0	0	0	0	0	0
54	6	5	1	0	0	0	0	0	0
55	3	3	0	0	0	0	0	0	0
56	9	9	0	0	0	0	0	0	0
57	2	2	0	0	0	0	0	0	0
58	3	3	0	0	0	0	0	0	0
59	5	5	0	0	0	0	0	0	0
60	3	2	1	0	0	0	0	0	0
61	16	8	6	2	0	0	1	0	1
62	5	5	0	0	0	0	0	0	0
63	4	2	2	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0
65	7	6	0	1	0	1	0	0	0
66	8	7	1	0	0	0	0	0	0
67	3	3	0	0	0	0	0	0	0
68	7	7	0	0	0	0	0	0	0
69	2	1	1	0	0	0	0	0	0
70	4	4	0	0	0	0	0	0	0
71	5	5	0	0	0	0	0	0	0
72	8	8	0	0	0	0	0	0	0
73	8	8	0	0	0	0	0	0	0
74	3	3	0	0	0	0	0	0	0
75	7	6	1	0	0	0	0	0	0
76	5	5	0	0	0	0	0	0	0
77	6	5	0	1	0	1	0	0	0
78	9	9	0	0	0	0	0	0	0
79	4	4	0	0	0	0	0	0	0
80	11	11	0	0	0	0	0	0	0
81	12	11	1	0	0	0	0	0	0
82	4	4	0	0	0	0	0	0	0
83	8	6	2	0	0	0	0	0	0
84	4	4	0	0	0	0	0	0	0
85	3	3	0	0	0	0	0	0	0
86	4	4	0	0	0	0	0	0	0
87	9	7	0	2	0	1	1	0	0
88	2	2	0	0	0	0	0	0	0
89	5	4	0	1	0	0	1	0	0
90	1	1	0	0	0	0	0	0	0
91	2	2	0	0	0	0	0	0	0
92	2	2	0	0	0	0	0	0	0
93	2	2	0	0	0	0	0	0	0
94	6	6	0	0	0	0	0	0	0
95	7	7	0	0	0	0	0	0	0
96	8	6	2	0	0	0	0	0	0
97	8	7	1	0	0	0	0	0	0
98	9	8	1	0	0	0	0	0	0
99	2	2	0	0	0	0	0	0	0
100	8	8	0	0	0	0	0	0	0
101	6	5	1	0	0	0	0	0	0
102	5	5	0	0	0	0	0	0	0
103	9	9	0	0	0	0	0	0	0
104	6	6	0	0	0	0	0	0	0
105	3	3	0	0	0	0	0	0	0
106	6	6	0	0	0	0	0	0	0
107	10	9	1	0	0	0	0	0	0
108	5	5	0	0	0	0	0	0	0
109	9	7	2	0	0	0	0	0	0
110	5	5	0	0	0	0	0	0	0
111	1	1	0	0	0	0	0	0	0
112	13	12	1	0	0	0	0	0	0
113	3	3	0	0	0	0	0	0	0
114	7	6	1	0	0	0	0	0	0
115	7	6	1	0	0	0	0	0	0
116	2	2	0	0	0	0	0	0	0
117	4	4	0	0	0	0	0	0	0
118	13	11	2	0	0	0	0	0	0
119	8	6	0	2	0	1	1	0	0
120	10	6	4	0	0	0	0	0	0
121	6	6	0	0	0	0	0	0	0
122	3	3	0	0	0	0	0	0	0
123	5	5	0	0	0	0	0	0	0
124	4	4	0	0	0	0	0	0	0
125	5	4	1	0	0	0	0	0	0
126	2	2	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0
128	5	4	1	0	0	0	0	0	0
129	2	0	2	0	0	0	0	0	0
130	7	7	0	0	0	0	0	0	0
131	5	5	0	0	0	0	0	0	0
132	6	5	0	1	0	0	0	0	1
133	5	5	0	0	0	0	0	0	0
134	8	7	1	0	0	0	0	0	0
135	5	5	0	0	0	0	0	0	0
136	3	3	0	0	0	0	0	0	0
137	4	4	0	0	0	0	0	0	0
138	2	2	0	0	0	0	0	0	0
139	8	7	0	1	0	0	1	0	0
140	2	2	0	0	0	0	0	0	0
141	3	3	0	0	0	0	0	0	0
142	2	2	0	0	0	0	0	0	0
143	8	8	0	0	0	0	0	0	0
144	7	4	3	0	0	0	0	0	0
145	4	4	0	0	0	0	0	0	0
146	9	9	0	0	0	0	0	0	0
147	4	4	0	0	0	0	0	0	0
148	5	5	0	0	0	0	0	0	0
149	9	7	1	1	0	0	1	0	0
150	7	7	0	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
151	7	6	1	0	0	0	0	0	0
152	0	0	0	0	0	0	0	0	0
153	7	7	0	0	0	0	0	0	0
154	6	5	1	0	0	0	0	0	0
155	10	1	5	4	0	1	2	0	1
156	7	7	0	0	0	0	0	0	0
157	3	0	2	1	0	1	0	0	0
158	4	4	0	0	0	0	0	0	0
159	7	6	1	0	0	0	0	0	0
160	2	2	0	0	0	0	0	0	0
161	11	9	2	0	0	0	0	0	0
162	4	4	0	0	0	0	0	0	0
163	6	5	0	1	0	0	1	0	0
164	8	7	0	1	0	0	1	0	0
165	2	2	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0
167	2	2	0	0	0	0	0	0	0
168	2	2	0	0	0	0	0	0	0
169	5	3	1	1	0	1	0	0	0
170	4	4	0	0	0	0	0	0	0
171	4	4	0	0	0	0	0	0	0
172	7	7	0	0	0	0	0	0	0
173	5	5	0	0	0	0	0	0	0
174	8	7	1	0	0	0	0	0	0
175	6	4	2	0	0	0	0	0	0
176	12	12	0	0	0	0	0	0	0
177	5	4	1	0	0	0	0	0	0
178	6	6	0	0	0	0	0	0	0
179	16	12	3	1	0	0	1	0	0
180	6	0	2	4	0	1	1	0	2
181	6	2	4	0	0	0	0	0	0
182	5	5	0	0	0	0	0	0	0
183	9	5	2	2	0	1	1	0	0
184	4	4	0	0	0	0	0	0	0
185	11	8	2	1	0	0	1	0	0
186	3	3	0	0	0	0	0	0	0
187	5	5	0	0	0	0	0	0	0
188	7	7	0	0	0	0	0	0	0
189	6	5	1	0	0	0	0	0	0
190	0	0	0	0	0	0	0	0	0
191	2	2	0	0	0	0	0	0	0
192	6	6	0	0	0	0	0	0	0
193	0	0	0	0	0	0	0	0	0
194	3	3	0	0	0	0	0	0	0
195	11	9	1	1	0	0	0	0	1
196	7	6	1	0	0	0	0	0	0
197	10	7	2	1	0	0	0	0	1
198	11	8	1	2	0	0	0	0	2
199	2	0	2	0	0	0	0	0	0
200	9	9	0	0	0	0	0	0	0
201	5	5	0	0	0	0	0	0	0
202	2	2	0	0	0	0	0	0	0
203	5	5	0	0	0	0	0	0	0
204	12	9	3	0	0	0	0	0	0
205	7	6	1	0	0	0	0	0	0
206	0	0	0	0	0	0	0	0	0
207	3	3	0	0	0	0	0	0	0
208	2	2	0	0	0	0	0	0	0
209	8	7	1	0	0	0	0	0	0
210	2	2	0	0	0	0	0	0	0
211	22	20	1	1	0	0	0	0	1
212	6	6	0	0	0	0	0	0	0
213	2	2	0	0	0	0	0	0	0
214	5	5	0	0	0	0	0	0	0
215	7	7	0	0	0	0	0	0	0
216	8	8	0	0	0	0	0	0	0
217	2	2	0	0	0	0	0	0	0
218	5	4	1	0	0	0	0	0	0
219	9	6	3	0	0	0	0	0	0
220	3	2	1	0	0	0	0	0	0
221	8	7	1	0	0	0	0	0	0
222	15	14	1	0	0	0	0	0	0
223	7	6	1	0	0	0	0	0	0
224	2	2	0	0	0	0	0	0	0
225	7	6	1	0	0	0	0	0	0
226	5	3	1	1	0	1	0	0	0
227	6	4	1	1	0	1	0	0	0
228	10	1	1	8	0	2	4	3	1
229	1	1	0	0	0	0	0	0	0
230	6	6	0	0	0	0	0	0	0
231	3	3	0	0	0	0	0	0	0
232	9	7	2	0	0	0	0	0	0
233	14	14	0	0	0	0	0	0	0
234	4	4	0	0	0	0	0	0	0
235	4	4	0	0	0	0	0	0	0
236	7	7	0	0	0	0	0	0	0
237	3	3	0	0	0	0	0	0	0
238	8	6	1	1	0	1	0	0	0
239	5	5	0	0	0	0	0	0	0
240	3	3	0	0	0	0	0	0	0
241	6	6	0	0	0	0	0	0	0
242	2	2	0	0	0	0	0	0	0
243	7	6	0	1	0	0	1	0	0
244	11	3	0	8	0	1	6	0	1
245	4	2	2	0	0	0	0	0	0
246	7	7	0	0	0	0	0	0	0
247	8	6	2	0	0	0	0	0	0
248	4	4	0	0	0	0	0	0	0
249	5	5	0	0	0	0	0	0	0
250	5	4	1	0	0	0	0	0	0
251	6	2	2	2	0	1	1	0	0
252	5	5	0	0	0	0	0	0	0
253	7	7	0	0	0	0	0	0	0
254	6	1	1	4	0	1	3	0	0
255	4	4	0	0	0	0	0	0	0
256	3	3	0	0	0	0	0	0	0
257	2	2	0	0	0	0	0	0	0
258	8	8	0	0	0	0	0	0	0
259	2	2	0	0	0	0	0	0	0
260	1	1	0	0	0	0	0	0	0
261	3	3	0	0	0	0	0	0	0
262	6	0	0	6	0	1	1	0	4
263	6	3	2	1	0	0	1	0	0
264	12	7	5	0	0	0	0	0	0
265	3	2	1	0	0	0	0	0	0
266	3	2	0	1	0	0	1	0	0
267	5	4	1	0	0	0	0	0	0
268	2	1	1	0	0	0	0	0	0
269	4	4	0	0	0	0	0	0	0
270	6	6	0	0	0	0	0	0	0
271	7	5	2	0	0	0	0	0	0
272	4	4	0	0	0	0	0	0	0
273	3	3	0	0	0	0	0	0	0
274	5	5	0	0	0	0	0	0	0
275	0	0	0	0	0	0	0	0	0
276	8	8	0	0	0	0	0	0	0
277	7	6	1	0	0	0	0	0	0
278	5	4	1	0	0	0	0	0	0
279	7	4	1	2	0	1	1	2	0
280	6	6	0	0	0	0	0	0	0
281	10	4	1	5	0	1	4	0	0
282	10	8	2	0	0	0	0	0	0
283	2	2	0	0	0	0	0	0	0
284	9	8	0	1	0	0	0	0	1
285	3	2	1	0	0	0	0	0	0
286	5	4	1	0	0	0	0	0	0
287	4	4	0	0	0	0	0	0	0
288	2	1	0	1	0	0	0	0	1
289	5	2	1	2	0	1	1	0	0
290	6	0	1	5	0	2	2	0	1
291	14	3	1	10	0	3	5	1	2
292	10	9	1	0	0	0	0	0	0
293	11	11	0	0	0	0	0	0	0
294	5	3	1	1	0	0	1	0	0
295	9	2	4	3	0	2	1	0	0
296	6	0	0	6	0	2	3	0	1
297	5	3	1	1	0	0	1	0	0
298	0	0	0	0	0	0	0	0	0
299	8	3	1	4	0	1	1	0	2
300	2	2	0	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
301	13	9	2	2	0	0	1	0	1
302	7	7	0	0	0	0	0	0	0
303	5	5	0	0	0	0	0	0	0
304	3	2	1	0	0	0	0	0	0
305	8	8	0	0	0	0	0	0	0
306	11	11	0	0	0	0	0	0	0
307	6	6	0	0	0	0	0	0	0
308	7	2	5	0	0	0	0	0	0
309	7	4	3	0	0	0	0	0	0
310	11	4	3	4	0	2	1	4	0
311	2	2	0	0	0	0	0	0	0
312	12	10	2	0	0	0	0	0	0
313	6	6	0	0	0	0	0	0	0
314	3	3	0	0	0	0	0	0	0
315	5	0	0	5	0	2	3	0	0
316	3	2	1	0	0	0	0	0	0
317	7	2	2	3	0	2	0	0	1
318	1	0	0	1	0	0	1	0	0
319	9	8	0	1	0	0	0	0	1
320	4	0	0	4	0	2	2	0	0
321	10	4	1	5	0	1	3	0	1
322	12	10	0	2	0	0	2	0	0
323	2	1	1	0	0	0	0	0	0
324	2	2	0	0	0	0	0	0	0
325	6	6	0	0	0	0	0	0	0
326	4	4	0	0	0	0	0	0	0
327	2	1	0	1	0	0	0	0	1
328	3	3	0	0	0	0	0	0	0
329	6	5	1	0	0	0	0	0	0
330	0	0	0	0	0	0	0	0	0
331	4	4	0	0	0	0	0	0	0
332	2	2	0	0	0	0	0	0	0
333	4	4	0	0	0	0	0	0	0
334	7	5	2	0	0	0	0	0	0
335	6	6	0	0	0	0	0	0	0
336	11	8	0	3	0	2	1	0	0
337	8	3	4	1	0	1	0	0	0
338	6	5	1	0	0	0	0	0	0
339	6	5	0	1	0	1	0	0	0
340	3	3	0	0	0	0	0	0	0
341	16	8	0	8	0	2	4	3	2
342	2	2	0	0	0	0	0	0	0
343	2	2	0	0	0	0	0	0	0
344	10	9	0	1	0	0	1	0	0
345	9	5	3	1	0	1	0	0	0
346	5	4	1	0	0	0	0	0	0
347	10	10	0	0	0	0	0	0	0
348	7	6	0	1	0	1	0	0	0
349	6	6	0	0	0	0	0	0	0
350	13	12	0	1	0	0	1	0	0
351	4	4	0	0	0	0	0	0	0
352	2	2	0	0	0	0	0	0	0
353	0	0	0	0	0	0	0	0	0
354	15	15	0	0	0	0	0	0	0
355	16	7	4	5	0	2	1	0	2
356	7	7	0	0	0	0	0	0	0
357	5	5	0	0	0	0	0	0	0
358	7	7	0	0	0	0	0	0	0
359	4	4	0	0	0	0	0	0	0
360	7	6	1	0	0	0	0	0	0
361	9	8	0	1	0	0	1	0	0
362	0	0	0	0	0	0	0	0	0
363	2	0	0	2	0	1	1	0	0
364	9	6	1	2	0	0	2	0	0
365	12	12	0	0	0	0	0	0	0
366	13	10	2	1	0	0	0	0	1
367	2	1	1	0	0	0	0	0	0
368	4	4	0	0	0	0	0	0	0
369	9	9	0	0	0	0	0	0	0
370	0	0	0	0	0	0	0	0	0
371	7	7	0	0	0	0	0	0	0
372	6	6	0	0	0	0	0	0	0
373	6	6	0	0	0	0	0	0	0
374	4	4	0	0	0	0	0	0	0
375	2	0	0	2	0	1	1	0	0
376	5	4	1	0	0	0	0	0	0
377	4	4	0	0	0	0	0	0	0
378	4	3	0	1	0	0	0	0	1
379	6	6	0	0	0	0	0	0	0
380	11	10	1	0	0	0	0	0	0
381	8	8	0	0	0	0	0	0	0
382	6	6	0	0	0	0	0	0	0
383	5	4	1	0	0	0	0	0	0
384	6	6	0	0	0	0	0	0	0
385	9	8	1	0	0	0	0	0	0
386	8	7	1	0	0	0	0	0	0
387	3	2	1	0	0	0	0	0	0
388	5	5	0	0	0	0	0	0	0
389	10	10	0	0	0	0	0	0	0
390	7	6	1	0	0	0	0	0	0
391	3	0	1	2	0	0	1	0	1
392	3	3	0	0	0	0	0	0	0
393	3	3	0	0	0	0	0	0	0
394	4	3	0	1	0	1	0	0	0
395	1	1	0	0	0	0	0	0	0
396	8	7	1	0	0	0	0	0	0
397	11	2	9	0	0	0	0	0	0
398	6	3	2	1	0	0	0	0	1
399	5	5	0	0	0	0	0	0	0
400	7	5	2	0	0	0	0	0	0
401	4	4	0	0	0	0	0	0	0
402	7	5	2	0	0	0	0	0	0
403	10	8	2	0	0	0	0	0	0
404	9	9	0	0	0	0	0	0	0
405	5	5	0	0	0	0	0	0	0
406	4	4	0	0	0	0	0	0	0
407	11	9	1	1	0	1	0	0	0
408	13	5	2	6	0	3	2	0	1
409	4	4	0	0	0	0	0	0	0
410	22	19	3	0	0	0	0	0	0
411	7	7	0	0	0	0	0	0	0
412	5	5	0	0	0	0	0	0	0
413	4	4	0	0	0	0	0	0	0
414	6	6	0	0	0	0	0	0	0
415	11	11	0	0	0	0	0	0	0
416	7	5	0	2	0	1	1	0	0
417	2	2	0	0	0	0	0	0	0
418	11	8	3	0	0	0	0	0	0
419	12	12	0	0	0	0	0	0	0
420	12	11	1	0	0	0	0	0	0
421	4	0	0	4	0	1	2	0	1
422	3	0	0	3	0	1	2	0	0
423	3	3	0	0	0	0	0	0	0
424	6	6	0	0	0	0	0	0	0
425	5	3	2	0	0	0	0	0	0
426	6	6	0	0	0	0	0	0	0
427	10	5	2	3	0	1	1	0	1
428	4	3	0	1	0	0	0	0	1
429	7	6	1	0	0	0	0	0	0
430	5	5	0	0	0	0	0	0	0
431	8	8	0	0	0	0	0	0	0
432	9	9	0	0	0	0	0	0	0
433	0	0	0	0	0	0	0	0	0
434	0	0	0	0	0	0	0	0	0
435	2	2	0	0	0	0	0	0	0
436	9	9	0	0	0	0	0	0	0
437	5	2	2	1	0	0	0	0	1
438	9	8	1	0	0	0	0	0	0
439	2	2	0	0	0	0	0	0	0
440	4	0	0	4	0	1	2	0	1
441	2	1	1	0	0	0	0	0	0
442	8	8	0	0	0	0	0	0	0
443	8	8	0	0	0	0	0	0	0
444	6	4	2	0	0	0	0	0	0
445	9	9	0	0	0	0	0	0	0
446	6	6	0	0	0	0	0	0	0
447	17	12	2	3	0	2	1	0	0
448	2	2	0	0	0	0	0	0	0
449	7	7	0	0	0	0	0	0	0
450	6	4	2	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
451	7	6	1	0	0	0	0	0	0
452	6	0	1	5	0	1	2	0	2
453	4	3	0	1	0	0	1	0	0
454	2	1	1	0	0	0	0	0	0
455	6	6	0	0	0	0	0	0	0
456	7	7	0	0	0	0	0	0	0
457	4	0	0	4	0	0	2	0	2
458	3	3	0	0	0	0	0	0	0
459	5	1	1	3	0	2	1	0	0
460	2	2	0	0	0	0	0	0	0
461	2	0	2	0	0	0	0	0	0
462	6	3	1	2	0	0	0	0	2
463	9	7	1	1	0	1	0	0	0
464	6	6	0	0	0	0	0	0	0
465	6	6	0	0	0	0	0	0	0
466	12	11	1	0	0	0	0	0	0
467	10	8	1	1	0	0	1	0	0
468	2	2	0	0	0	0	0	0	0
469	7	6	1	0	0	0	0	0	0
470	11	10	1	0	0	0	0	0	0
471	4	4	0	0	0	0	0	0	0
472	7	6	0	1	0	0	0	0	1
473	4	0	0	4	0	1	1	0	2
474	7	6	1	0	0	0	0	0	0
475	6	0	0	6	0	2	0	0	4
476	4	4	0	0	0	0	0	0	0
477	7	6	0	1	0	0	0	0	1
478	9	7	2	0	0	0	0	0	0
479	7	5	2	0	0	0	0	0	0
480	6	6	0	0	0	0	0	0	0
481	0	0	0	0	0	0	0	0	0
482	2	2	0	0	0	0	0	0	0
483	11	10	1	0	0	0	0	0	0
484	2	1	0	1	0	0	0	0	1
485	8	8	0	0	0	0	0	0	0
486	2	2	0	0	0	0	0	0	0
487	8	8	0	0	0	0	0	0	0
488	8	7	1	0	0	0	0	0	0
489	4	4	0	0	0	0	0	0	0
490	6	6	0	0	0	0	0	0	0
491	2	1	1	0	0	0	0	0	0
492	8	8	0	0	0	0	0	0	0
493	10	9	1	0	0	0	0	0	0
494	7	6	1	0	0	0	0	0	0
495	8	8	0	0	0	0	0	0	0
496	6	2	2	2	0	2	0	0	0
497	6	0	2	4	0	2	2	4	0
498	7	7	0	0	0	0	0	0	0
499	4	4	0	0	0	0	0	0	0
500	9	5	4	0	0	0	0	0	0
501	4	3	1	0	0	0	0	0	0
502	4	3	1	0	0	0	0	0	0
503	2	2	0	0	0	0	0	0	0
504	15	14	0	1	0	0	0	0	1
505	0	0	0	0	0	0	0	0	0
506	6	6	0	0	0	0	0	0	0
507	14	11	2	1	0	1	0	0	0
508	8	8	0	0	0	0	0	0	0
509	4	4	0	0	0	0	0	0	0
510	8	8	0	0	0	0	0	0	0
511	8	8	0	0	0	0	0	0	0
512	4	4	0	0	0	0	0	0	0
513	2	2	0	0	0	0	0	0	0
514	5	5	0	0	0	0	0	0	0
515	4	4	0	0	0	0	0	0	0
516	3	3	0	0	0	0	0	0	0
517	5	4	1	0	0	0	0	0	0
518	6	6	0	0	0	0	0	0	0
519	2	2	0	0	0	0	0	0	0
520	4	3	1	0	0	0	0	0	0
521	15	12	2	1	0	1	0	0	0
522	7	5	0	2	0	0	0	2	0
523	7	4	1	2	0	0	2	0	0
524	1	1	0	0	0	0	0	0	0
525	0	0	0	0	0	0	0	0	0
526	7	5	1	1	0	0	1	0	0
527	2	2	0	0	0	0	0	0	0
528	2	2	0	0	0	0	0	0	0
529	9	4	3	2	0	2	0	0	0
530	4	3	1	0	0	0	0	0	0
531	7	4	1	2	0	1	0	0	1
532	12	7	5	0	0	0	0	0	0
533	5	5	0	0	0	0	0	0	0
534	8	7	0	1	0	0	1	0	0
535	8	8	0	0	0	0	0	0	0
536	11	4	5	2	0	0	2	2	0
537	5	3	1	1	0	1	0	0	0
538	2	2	0	0	0	0	0	0	0
539	6	5	1	0	0	0	0	0	0
540	15	5	3	7	0	2	4	0	1
541	4	4	0	0	0	0	0	0	0
542	7	5	2	0	0	0	0	0	0
543	6	3	1	2	0	1	1	0	0
544	3	3	0	0	0	0	0	0	0
545	4	4	0	0	0	0	0	0	0
546	12	11	1	0	0	0	0	0	0
547	2	2	0	0	0	0	0	0	0
548	2	0	0	2	0	0	1	0	1
549	8	8	0	0	0	0	0	0	0
550	4	3	0	1	0	0	1	0	0
551	4	4	0	0	0	0	0	0	0
552	2	2	0	0	0	0	0	0	0
553	7	0	0	7	0	2	4	0	1
554	17	14	1	2	0	0	1	0	1
555	2	2	0	0	0	0	0	0	0
556	5	4	1	0	0	0	0	0	0
557	2	0	0	2	0	0	0	0	2
558	2	2	0	0	0	0	0	0	0
559	4	2	2	0	0	0	0	0	0
560	10	8	1	1	0	0	1	0	0
561	5	4	1	0	0	0	0	0	0
562	8	4	3	1	0	0	1	0	0
563	9	8	1	0	0	0	0	0	0
564	10	10	0	0	0	0	0	0	0
565	7	5	2	0	0	0	0	0	0
566	2	1	1	0	0	0	0	0	0
567	9	6	1	2	0	1	1	0	0
568	6	6	0	0	0	0	0	0	0
569	5	5	0	0	0	0	0	0	0
570	2	2	0	0	0	0	0	0	0
571	9	0	3	6	0	2	0	5	0
572	2	2	0	0	0	0	0	0	0
573	6	5	1	0	0	0	0	0	0
574	6	2	1	3	0	1	1	0	1
575	5	1	2	2	0	1	1	0	0
576	8	5	2	1	0	1	0	0	0
577	2	2	0	0	0	0	0	0	0
578	2	2	0	0	0	0	0	0	0
579	8	8	0	0	0	0	0	0	0
580	6	6	0	0	0	0	0	0	0
581	9	9	0	0	0	0	0	0	0
582	10	10	0	0	0	0	0	0	0
583	8	8	0	0	0	0	0	0	0
584	4	4	0	0	0	0	0	0	0
585	7	6	1	0	0	0	0	0	0
586	5	4	1	0	0	0	0	0	0
587	7	0	0	7	0	2	3	0	2
588	7	7	0	0	0	0	0	0	0
589	4	3	1	0	0	0	0	0	0
590	4	4	0	0	0	0	0	0	0
591	8	8	0	0	0	0	0	0	0
592	3	0	3	0	0	0	0	0	0
593	5	5	0	0	0	0	0	0	0
594	20	12	5	3	0	1	1	0	1
595	7	5	1	1	0	0	1	0	0
596	7	7	0	0	0	0	0	0	0
597	6	6	0	0	0	0	0	0	0
598	2	2	0	0	0	0	0	0	0
599	5	5	0	0	0	0	0	0	0
600	7	5	1	1	0	0	0	0	1

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
601	9	9	0	0	0	0	0	0	0
602	6	6	0	0	0	0	0	0	0
603	7	2	1	4	0	2	1	0	1
604	4	4	0	0	0	0	0	0	0
605	7	7	0	0	0	0	0	0	0
606	4	4	0	0	0	0	0	0	0
607	4	4	0	0	0	0	0	0	0
608	5	2	0	3	0	0	2	0	1
609	2	1	1	0	0	0	0	0	0
610	3	0	0	3	0	1	1	0	1
611	6	3	3	0	0	0	0	0	0
612	8	8	0	0	0	0	0	0	0
613	4	4	0	0	0	0	0	0	0
614	6	3	3	0	0	0	0	0	0
615	6	4	1	1	0	0	1	0	0
616	7	2	4	1	0	1	0	0	0
617	4	4	0	0	0	0	0	0	0
618	1	1	0	0	0	0	0	0	0
619	0	0	0	0	0	0	0	0	0
620	3	0	0	3	0	1	0	0	2
621	5	4	0	1	0	0	0	0	1
622	4	0	2	2	0	0	0	0	2
623	3	3	0	0	0	0	0	0	0
624	1	0	0	1	0	0	1	0	0
625	2	1	0	1	0	0	1	0	0
626	8	8	0	0	0	0	0	0	0
627	11	10	1	0	0	0	0	0	0
628	10	10	0	0	0	0	0	0	0
629	2	1	1	0	0	0	0	0	0
630	5	4	0	1	0	0	1	0	0
631	4	4	0	0	0	0	0	0	0
632	2	0	0	2	0	1	1	0	0
633	3	3	0	0	0	0	0	0	0
634	8	7	1	0	0	0	0	0	0
635	5	4	1	0	0	0	0	0	0
636	9	9	0	0	0	0	0	0	0
637	4	1	1	2	0	1	1	0	0
638	9	5	4	0	0	0	0	0	0
639	5	5	0	0	0	0	0	0	0
640	4	4	0	0	0	0	0	0	0
641	2	0	0	2	0	0	0	0	2
642	5	5	0	0	0	0	0	0	0
643	8	8	0	0	0	0	0	0	0
644	3	1	1	1	0	0	0	0	1
645	6	6	0	0	0	0	0	0	0
646	4	0	0	4	0	1	0	0	3
647	8	0	0	8	0	3	2	0	3
648	4	4	0	0	0	0	0	0	0
649	4	0	1	3	0	1	1	0	1
650	2	0	0	2	0	1	1	0	0
651	5	2	2	1	0	1	0	0	0
652	7	2	0	5	0	1	1	0	3
653	8	8	0	0	0	0	0	0	0
654	5	5	0	0	0	0	0	0	0
655	10	3	2	5	0	0	2	3	1
656	9	7	2	0	0	0	0	0	0
657	3	3	0	0	0	0	0	0	0
658	5	4	0	1	0	0	1	0	0
659	6	6	0	0	0	0	0	0	0
660	4	4	0	0	0	0	0	0	0
661	7	7	0	0	0	0	0	0	0
662	2	2	0	0	0	0	0	0	0
663	8	4	4	0	0	0	0	0	0
664	2	2	0	0	0	0	0	0	0
665	5	4	0	1	0	0	0	0	1
666	10	5	4	1	0	1	0	0	0
667	7	6	1	0	0	0	0	0	0
668	3	3	0	0	0	0	0	0	0
669	4	3	1	0	0	0	0	0	0
670	8	8	0	0	0	0	0	0	0
671	7	6	1	0	0	0	0	0	0
672	2	0	2	0	0	0	0	0	0
673	8	7	0	1	0	0	0	0	1
674	9	9	0	0	0	0	0	0	0
675	0	0	0	0	0	0	0	0	0
676	8	8	0	0	0	0	0	0	0
677	3	3	0	0	0	0	0	0	0
678	5	5	0	0	0	0	0	0	0
679	4	1	1	2	0	1	1	0	0
680	10	9	0	1	0	1	0	0	0
681	4	0	1	3	0	1	0	0	2
682	4	0	0	4	0	0	2	0	2
683	3	3	0	0	0	0	0	0	0
684	4	0	1	3	0	1	0	0	2
685	3	1	1	1	0	1	0	0	0
686	6	6	0	0	0	0	0	0	0
687	4	0	0	4	0	1	0	0	3
688	5	4	1	0	0	0	0	0	0
689	5	4	0	1	0	1	0	0	0
690	2	2	0	0	0	0	0	0	0
691	8	8	0	0	0	0	0	0	0
692	5	5	0	0	0	0	0	0	0
693	8	7	1	0	0	0	0	0	0
694	9	9	0	0	0	0	0	0	0
695	4	4	0	0	0	0	0	0	0
696	3	3	0	0	0	0	0	0	0
697	5	4	1	0	0	0	0	0	0
698	5	4	1	0	0	0	0	0	0
699	2	0	0	2	0	1	0	0	1
700	11	6	2	3	0	1	2	0	0
701	7	4	2	1	0	1	0	0	0
702	9	9	0	0	0	0	0	0	0
703	13	0	0	13	0	3	6	0	4
704	10	10	0	0	0	0	0	0	0
705	9	9	0	0	0	0	0	0	0
706	3	3	0	0	0	0	0	0	0
707	7	0	1	6	0	1	5	0	0
708	4	2	1	1	0	0	1	0	0
709	7	4	0	3	0	1	1	0	1
710	7	5	1	1	0	0	1	0	0
711	4	0	0	4	0	1	1	0	2
712	16	14	1	1	0	1	0	0	0
713	2	2	0	0	0	0	0	0	0
714	5	4	1	0	0	0	0	0	0
715	9	7	1	1	0	1	0	0	0
716	2	2	0	0	0	0	0	0	0
717	10	9	0	1	0	0	0	0	1
718	7	7	0	0	0	0	0	0	0
719	0	0	0	0	0	0	0	0	0
720	8	6	1	1	0	0	1	0	0
721	7	5	2	0	0	0	0	0	0
722	6	0	0	6	0	2	3	0	1
723	4	4	0	0	0	0	0	0	0
724	9	0	1	8	0	4	3	0	1
725	4	3	1	0	0	0	0	0	0
726	4	3	1	0	0	0	0	0	0
727	9	7	1	1	0	0	0	0	1
728	6	0	2	4	0	1	1	0	2
729	6	6	0	0	0	0	0	0	0
730	6	0	1	5	0	2	1	0	2
731	5	4	0	1	0	1	0	0	0
732	2	1	1	0	0	0	0	0	0
733	5	4	1	0	0	0	0	0	0
734	11	4	5	2	0	2	0	0	0
735	9	7	1	1	0	0	0	0	1
736	14	9	3	2	0	1	0	0	1
737	2	2	0	0	0	0	0	0	0
738	10	8	0	2	0	1	0	0	1
739	5	4	1	0	0	0	0	0	0
740	10	10	0	0	0	0	0	0	0
741	3	3	0	0	0	0	0	0	0
742	9	8	1	0	0	0	0	0	0
743	6	6	0	0	0	0	0	0	0
744	10	9	1	0	0	0	0	0	0
745	4	0	0	4	0	1	2	0	1
746	6	5	0	1	0	1	0	0	0
747	10	9	1	0	0	0	0	0	0
748	4	4	0	0	0	0	0	0	0
749	7	0	0	7	0	3	3	0	1
750	4	2	1	1	0	1	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
751	7	7	0	0	0	0	0	0	0
752	8	6	2	0	0	0	0	0	0
753	4	1	0	3	0	1	1	0	1
754	10	10	0	0	0	0	0	0	0
755	4	3	0	1	0	0	1	0	0
756	5	5	0	0	0	0	0	0	0
757	3	3	0	0	0	0	0	0	0
758	7	5	2	0	0	0	0	0	0
759	5	2	3	0	0	0	0	0	0
760	4	3	0	1	0	1	0	0	0
761	6	0	0	6	0	3	2	0	1
762	5	4	1	0	0	0	0	0	0
763	8	0	0	8	0	2	3	0	3
764	5	4	1	0	0	0	0	0	0
765	0	0	0	0	0	0	0	0	0
766	6	4	1	1	0	1	0	0	0
767	5	4	0	1	0	0	1	0	0
768	8	0	3	5	0	1	4	0	0
769	4	3	1	0	0	0	0	0	0
770	1	1	0	0	0	0	0	0	0
771	2	2	0	0	0	0	0	0	0
772	10	9	1	0	0	0	0	0	0
773	6	6	0	0	0	0	0	0	0
774	2	2	0	0	0	0	0	0	0
775	6	5	0	1	0	1	0	0	0
776	2	2	0	0	0	0	0	0	0
777	5	5	0	0	0	0	0	0	0
778	7	7	0	0	0	0	0	0	0
779	9	6	1	2	0	0	0	0	2
780	6	6	0	0	0	0	0	0	0
781	7	5	2	0	0	0	0	0	0
782	6	3	2	1	0	0	0	0	1
783	5	5	0	0	0	0	0	0	0
784	2	2	0	0	0	0	0	0	0
785	1	1	0	0	0	0	0	0	0
786	8	6	2	0	0	0	0	0	0
787	8	5	3	0	0	0	0	0	0
788	2	2	0	0	0	0	0	0	0
789	4	0	1	3	0	0	1	0	2
790	11	9	1	1	0	1	0	0	0
791	8	6	1	1	0	0	1	0	0
792	5	5	0	0	0	0	0	0	0
793	3	3	0	0	0	0	0	0	0
794	7	1	3	3	0	1	1	0	1
795	6	6	0	0	0	0	0	0	0
796	2	2	0	0	0	0	0	0	0
797	2	0	2	0	0	0	0	0	0
798	16	14	0	2	0	1	1	0	0
799	9	9	0	0	0	0	0	0	0
800	6	0	1	5	0	1	0	0	4
801	12	9	2	1	0	0	0	0	1
802	9	0	0	9	0	4	3	0	2
803	5	5	0	0	0	0	0	0	0
804	11	7	3	1	0	0	0	0	1
805	4	4	0	0	0	0	0	0	0
806	5	5	0	0	0	0	0	0	0
807	6	5	1	0	0	0	0	0	0
808	4	4	0	0	0	0	0	0	0
809	7	0	0	7	0	3	4	0	0
810	2	0	0	2	0	0	0	0	2
811	6	0	2	4	0	2	1	0	1
812	7	0	0	7	0	2	1	0	4
813	7	2	2	3	0	1	2	0	0
814	2	2	0	0	0	0	0	0	0
815	5	1	0	4	0	1	2	0	1
816	8	8	0	0	0	0	0	0	0
817	6	2	0	4	0	1	2	0	1
818	2	2	0	0	0	0	0	0	0
819	3	0	0	3	0	1	2	0	0
820	10	9	1	0	0	0	0	0	0
821	0	0	0	0	0	0	0	0	0
822	0	0	0	0	0	0	0	0	0
823	11	2	2	7	0	1	2	0	4
824	5	4	1	0	0	0	0	0	0
825	9	5	1	3	0	2	1	0	0
826	8	4	3	1	0	1	0	0	0
827	4	0	0	4	0	1	1	0	2
828	12	6	2	4	0	2	1	0	1
829	2	2	0	0	0	0	0	0	0
830	9	6	2	1	0	0	1	0	0
831	0	0	0	0	0	0	0	0	0
832	6	0	0	6	0	3	1	6	0
833	8	0	2	6	0	2	3	0	1
834	11	11	0	0	0	0	0	0	0
835	6	3	0	3	0	1	1	0	1
836	6	0	0	6	0	0	1	0	5
837	2	0	0	2	0	1	1	0	0
838	4	3	1	0	0	0	0	0	0
839	12	6	2	4	0	1	2	0	1
840	7	0	3	4	0	1	2	0	1
841	8	0	1	7	0	3	3	0	1
842	9	7	2	0	0	0	0	0	0
843	5	0	0	5	0	1	2	0	2
844	7	0	4	3	0	1	2	0	0
845	6	6	0	0	0	0	0	0	0
846	3	3	0	0	0	0	0	0	0
847	5	5	0	0	0	0	0	0	0
848	2	0	2	0	0	0	0	0	0
849	2	2	0	0	0	0	0	0	0
850	5	4	1	0	0	0	0	0	0
851	12	1	1	10	0	2	7	0	1
852	3	2	1	0	0	0	0	0	0
853	6	6	0	0	0	0	0	0	0
854	2	0	0	2	0	0	1	0	1
855	2	0	0	2	0	1	1	0	0
856	2	0	2	0	0	0	0	0	0
857	15	6	4	5	0	1	3	0	1
858	6	3	0	3	0	1	1	0	1
859	6	6	0	0	0	0	0	0	0
860	4	2	2	0	0	0	0	0	0
861	18	14	4	0	0	0	0	0	0
862	5	5	0	0	0	0	0	0	0
863	4	3	1	0	0	0	0	0	0
864	10	0	2	8	0	3	4	0	1
865	4	3	0	1	0	1	0	0	0
866	4	4	0	0	0	0	0	0	0
867	6	2	1	3	0	0	1	0	2
868	4	4	0	0	0	0	0	0	0
869	5	5	0	0	0	0	0	0	0
870	5	0	0	5	0	2	1	0	2
871	4	0	1	3	0	1	2	0	0
872	3	3	0	0	0	0	0	0	0
873	2	2	0	0	0	0	0	0	0
874	5	5	0	0	0	0	0	0	0
875	2	2	0	0	0	0	0	0	0
876	6	0	2	4	0	0	2	0	2
877	2	2	0	0	0	0	0	0	0
878	0	0	0	0	0	0	0	0	0
879	0	0	0	0	0	0	0	0	0
880	4	0	2	2	0	0	1	0	1
881	3	0	0	3	0	0	1	0	2
882	7	3	1	3	0	1	1	0	1
883	5	0	0	5	0	1	2	0	2
884	0	0	0	0	0	0	0	0	0
885	2	2	0	0	0	0	0	0	0
886	15	13	2	0	0	0	0	0	0
887	6	0	0	6	0	1	4	0	1
888	10	9	1	0	0	0	0	0	0
889	7	0	2	5	0	2	3	0	0
890	2	2	0	0	0	0	0	0	0
891	3	3	0	0	0	0	0	0	0
892	6	6	0	0	0	0	0	0	0
893	7	7	0	0	0	0	0	0	0
894	4	3	0	1	0	0	1	0	0
895	2	2	0	0	0	0	0	0	0
896	6	5	1	0	0	0	0	0	0
897	7	5	0	2	0	1	0	0	1
898	16	0	0	16	0	7	5	0	4
899	9	7	1	1	0	1	0	0	0
900	4	3	1	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
901	6	0	1	5	0	0	3	0	2
902	5	0	0	5	0	2	1	0	2
903	6	5	1	0	0	0	0	0	0
904	6	5	1	0	0	0	0	0	0
905	8	1	0	7	0	3	2	0	2
906	2	0	0	2	0	0	0	0	2
907	4	4	0	0	0	0	0	0	0
908	8	4	4	0	0	0	0	0	0
909	4	4	0	0	0	0	0	0	0
910	3	3	0	0	0	0	0	0	0
911	7	6	1	0	0	0	0	0	0
912	4	3	1	0	0	0	0	0	0
913	4	0	0	4	0	2	0	0	2
914	6	4	2	0	0	0	0	0	0
915	10	0	0	10	0	4	2	0	4
916	7	6	1	0	0	0	0	0	0
917	7	3	2	2	0	2	0	0	0
918	2	1	0	1	0	0	1	0	0
919	2	1	1	0	0	0	0	0	0
920	7	7	0	0	0	0	0	0	0
921	2	2	0	0	0	0	0	0	0
922	5	0	0	5	0	1	2	0	2
923	5	4	1	0	0	0	0	0	0
924	9	9	0	0	0	0	0	0	0
925	13	12	1	0	0	0	0	0	0
926	10	8	1	1	0	0	1	0	0
927	7	4	3	0	0	0	0	0	0
928	7	7	0	0	0	0	0	0	0
929	5	0	0	5	0	2	0	0	3
930	3	2	1	0	0	0	0	0	0
931	12	10	0	2	0	1	1	0	0
932	0	0	0	0	0	0	0	0	0
933	5	4	1	0	0	0	0	0	0
934	14	11	3	0	0	0	0	0	0
935	8	3	2	3	0	1	2	0	0
936	12	9	0	3	0	0	1	0	2
937	8	0	4	4	0	1	2	1	1
938	3	1	2	0	0	0	0	0	0
939	4	0	0	4	0	2	2	0	0
940	2	2	0	0	0	0	0	0	0
941	4	0	0	4	0	1	2	0	1
942	2	0	1	1	0	0	0	0	1
943	4	4	0	0	0	0	0	0	0
944	12	0	0	12	0	2	4	0	6
945	2	2	0	0	0	0	0	0	0
946	18	9	4	5	0	2	3	0	0
947	8	7	1	0	0	0	0	0	0
948	2	0	0	2	0	1	1	0	0
949	6	6	0	0	0	0	0	0	0
950	7	7	0	0	0	0	0	0	0
951	3	0	0	3	0	1	2	0	0
952	4	4	0	0	0	0	0	0	0
953	4	4	0	0	0	0	0	0	0
954	7	6	1	0	0	0	0	0	0
955	7	6	0	1	0	0	0	0	1
956	8	0	1	7	0	1	3	0	3
957	4	4	0	0	0	0	0	0	0
958	4	4	0	0	0	0	0	0	0
959	8	8	0	0	0	0	0	0	0
960	5	0	0	5	0	2	3	0	0
961	7	5	0	2	0	1	1	0	0
962	5	0	0	5	0	0	2	0	3
963	10	0	1	9	0	3	5	0	1
964	11	0	0	11	0	2	4	0	5
965	4	4	0	0	0	0	0	0	0
966	5	3	2	0	0	0	0	0	0
967	8	2	1	5	0	1	2	0	2
968	9	1	2	6	0	3	3	0	0
969	2	2	0	0	0	0	0	0	0
970	3	0	0	3	0	2	1	0	0
971	5	4	0	1	0	1	0	0	0
972	6	5	1	0	0	0	0	0	0
973	5	5	0	0	0	0	0	0	0
974	5	2	2	1	0	0	1	0	0
975	4	2	0	2	0	1	1	0	0
976	2	2	0	0	0	0	0	0	0
977	8	8	0	0	0	0	0	0	0
978	7	6	1	0	0	0	0	0	0
979	12	8	2	2	0	0	1	0	1
980	7	7	0	0	0	0	0	0	0
981	2	2	0	0	0	0	0	0	0
982	2	1	0	1	0	0	0	0	1
983	9	8	1	0	0	0	0	0	0
984	5	4	1	0	0	0	0	0	0
985	4	0	0	4	0	1	2	0	1
986	7	6	1	0	0	0	0	0	0
987	6	5	1	0	0	0	0	0	0
988	9	8	0	1	0	1	0	0	0
989	3	2	1	0	0	0	0	0	0
990	4	4	0	0	0	0	0	0	0
991	6	6	0	0	0	0	0	0	0
992	8	5	1	2	0	1	1	0	0
993	8	0	1	7	0	2	1	0	4
994	4	3	0	1	0	0	1	0	0
995	9	7	2	0	0	0	0	0	0
996	11	9	0	2	0	0	2	0	0
997	4	2	0	2	0	1	1	0	0
998	7	1	0	6	0	2	2	3	1
999	2	1	1	0	0	0	0	0	0
1000	10	9	1	0	0	0	0	0	0
1001	4	1	1	2	0	0	1	0	1
1002	12	3	1	8	0	1	7	0	0
1003	10	0	4	6	0	2	2	5	0
1004	4	4	0	0	0	0	0	0	0
1005	10	10	0	0	0	0	0	0	0
1006	10	3	1	6	0	2	3	0	1
1007	7	0	2	5	0	2	2	0	1
1008	4	4	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0	0
1010	6	4	2	0	0	0	0	0	0
1011	0	0	0	0	0	0	0	0	0
1012	5	2	2	1	0	1	0	0	0
1013	10	7	1	2	0	0	1	0	1
1014	8	0	1	7	0	2	4	0	1
1015	10	9	1	0	0	0	0	0	0
1016	0	0	0	0	0	0	0	0	0
1017	4	4	0	0	0	0	0	0	0
1018	3	2	1	0	0	0	0	0	0
1019	7	2	1	4	0	0	2	0	2
1020	2	0	1	1	0	0	0	0	1
1021	4	4	0	0	0	0	0	0	0
1022	2	1	0	1	0	0	0	0	1
1023	4	4	0	0	0	0	0	0	0
1024	6	5	1	0	0	0	0	0	0
1025	5	0	1	4	0	1	1	0	2
1026	2	0	0	2	0	0	1	0	1
1027	10	5	3	2	0	0	2	0	0
1028	13	12	1	0	0	0	0	0	0
1029	6	1	0	5	0	1	2	0	2
1030	4	4	0	0	0	0	0	0	0
1031	7	7	0	0	0	0	0	0	0
1032	7	6	1	0	0	0	0	0	0
1033	4	1	2	1	0	1	0	0	0
1034	7	5	1	1	0	0	1	0	0
1035	2	2	0	0	0	0	0	0	0
1036	4	2	0	2	0	1	1	0	0
1037	4	0	0	4	0	2	2	0	0
1038	4	1	1	2	0	0	0	0	2
1039	5	2	3	0	0	0	0	0	0
1040	6	1	0	5	0	2	2	0	1
1041	6	6	0	0	0	0	0	0	0
1042	7	5	2	0	0	0	0	0	0
1043	8	7	0	1	0	0	1	0	0
1044	4	2	2	0	0	0	0	0	0
1045	14	0	2	12	0	4	6	0	2
1046	6	0	1	5	0	0	1	0	4
1047	6	0	0	6	0	2	2	0	2
1048	3	3	0	0	0	0	0	0	0
1049	7	2	5	0	0	0	0	0	0
1050	8	0	1	7	0	2	1	0	4

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
1051	4	3	1	0	0	0	0	0	0
1052	3	0	1	2	0	0	0	0	2
1053	14	0	11	3	0	2	3	0	8
1054	7	7	0	0	0	0	0	0	0
1055	5	0	0	5	0	2	2	0	1
1056	2	0	1	1	0	1	0	0	0
1057	10	8	1	1	0	1	0	0	0
1058	5	0	2	3	0	2	1	0	0
1059	9	0	2	7	0	2	2	0	3
1060	3	0	0	3	0	1	2	0	0
1061	4	0	0	4	0	1	1	0	2
1062	2	2	0	0	0	0	0	0	0
1063	7	4	1	2	0	1	0	0	1
1064	3	3	0	0	0	0	0	0	0
1065	4	0	0	4	0	2	2	0	0
1066	0	0	0	0	0	0	0	0	0
1067	12	0	0	12	0	3	6	0	3
1068	4	0	2	2	0	0	2	0	0
1069	2	2	0	0	0	0	0	0	0
1070	7	6	1	0	0	0	0	0	0
1071	2	2	0	0	0	0	0	0	0
1072	10	10	0	0	0	0	0	0	0
1073	2	1	0	1	0	0	1	0	0
1074	11	7	1	3	0	2	0	0	1
1075	5	3	2	0	0	0	0	0	0
1076	9	6	0	3	0	0	1	0	2
1077	4	0	0	4	0	1	0	0	3
1078	8	0	1	7	0	1	4	0	2
1079	11	1	3	7	0	2	3	0	2
1080	8	8	0	0	0	0	0	0	0
1081	8	7	1	0	0	0	0	0	0
1082	2	2	0	0	0	0	0	0	0
1083	4	0	0	4	0	1	1	0	2
1084	5	3	1	1	0	1	0	0	0
1085	8	7	1	0	0	0	0	0	0
1086	6	6	0	0	0	0	0	0	0
1087	6	2	0	4	0	1	1	0	2
1088	2	0	1	1	0	0	1	0	0
1089	7	4	2	1	0	0	0	0	1
1090	11	0	0	11	0	4	5	0	2
1091	2	2	0	0	0	0	0	0	0
1092	4	4	0	0	0	0	0	0	0
1093	3	3	0	0	0	0	0	0	0
1094	7	5	2	0	0	0	0	0	0
1095	6	3	2	1	0	0	1	0	0
1096	6	6	0	0	0	0	0	0	0
1097	6	4	0	2	0	0	1	0	1
1098	7	6	0	1	0	0	1	0	0
1099	12	3	3	6	0	1	1	0	4
1100	2	0	0	2	0	0	0	0	2
1101	9	8	0	1	0	1	0	0	0
1102	6	5	0	1	0	0	1	0	0
1103	3	0	0	3	0	1	1	0	1
1104	8	7	0	1	0	0	0	0	1
1105	7	7	0	0	0	0	0	0	0
1106	4	0	0	4	0	1	2	0	1
1107	4	4	0	0	0	0	0	0	0
1108	2	2	0	0	0	0	0	0	0
1109	6	6	0	0	0	0	0	0	0
1110	6	0	1	5	0	1	2	0	2
1111	5	0	2	3	0	1	2	0	0
1112	5	5	0	0	0	0	0	0	0
1113	2	2	0	0	0	0	0	0	0
1114	3	3	0	0	0	0	0	0	0
1115	3	3	0	0	0	0	0	0	0
1116	8	6	2	0	0	0	0	0	0
1117	4	0	0	4	0	1	1	0	2
1118	10	9	1	0	0	0	0	0	0
1119	3	2	1	0	0	0	0	0	0
1120	6	0	0	6	0	1	1	0	4
1121	5	0	1	4	0	2	2	0	0
1122	3	2	0	1	0	1	0	0	0
1123	6	0	1	5	0	2	1	0	2
1124	5	4	1	0	0	0	0	0	0
1125	6	0	1	5	0	1	2	2	2
1126	3	1	0	2	0	1	1	0	0
1127	10	9	1	0	0	0	0	0	0
1128	2	2	0	0	0	0	0	0	0
1129	2	2	0	0	0	0	0	0	0
1130	1	0	1	0	0	0	0	0	0
1131	2	0	0	2	0	0	1	0	1
1132	3	0	3	0	0	0	0	0	0
1133	4	0	0	4	0	0	0	0	4
1134	7	0	0	7	0	1	2	0	4
1135	6	6	0	0	0	0	0	0	0
1136	2	2	0	0	0	0	0	0	0
1137	3	3	0	0	0	0	0	0	0
1138	10	0	2	8	0	1	4	1	2
1139	7	0	2	5	0	3	1	0	1
1140	7	5	2	0	0	0	0	0	0
1141	11	1	2	8	0	3	5	0	0
1142	1	0	0	1	0	0	0	0	1
1143	7	5	2	0	0	0	0	0	0
1144	10	9	1	0	0	0	0	0	0
1145	6	4	0	2	0	1	1	0	0
1146	4	4	0	0	0	0	0	0	0
1147	7	0	0	7	0	3	4	0	0
1148	3	2	1	0	0	0	0	0	0
1149	9	8	1	0	0	0	0	0	0
1150	0	0	0	0	0	0	0	0	0
1151	4	0	3	1	0	1	0	0	0
1152	5	2	2	1	0	0	0	0	1
1153	0	0	0	0	0	0	0	0	0
1154	9	6	3	0	0	0	0	0	0
1155	9	2	2	5	0	2	2	0	1
1156	4	0	1	3	0	0	2	0	1
1157	10	0	2	8	0	1	4	0	3
1158	3	3	0	0	0	0	0	0	0
1159	9	6	3	0	0	0	0	0	0
1160	2	0	0	2	0	0	0	0	2
1161	5	2	0	3	0	1	2	0	0
1162	3	1	2	0	0	0	0	0	0
1163	7	6	0	1	0	0	0	0	1
1164	9	0	1	8	0	2	1	0	5
1165	10	10	0	0	0	0	0	0	0
1166	3	3	0	0	0	0	0	0	0
1167	6	6	0	0	0	0	0	0	0
1168	7	3	2	2	0	0	1	0	1
1169	4	0	0	4	0	1	2	0	1
1170	5	2	0	3	0	1	1	0	1
1171	4	4	0	0	0	0	0	0	0
1172	4	4	0	0	0	0	0	0	0
1173	5	3	1	1	0	1	0	0	0
1174	3	0	3	0	0	0	0	0	0
1175	2	0	1	1	0	0	0	0	1
1176	8	7	1	0	0	0	0	0	0
1177	6	5	1	0	0	0	0	0	0
1178	12	8	4	0	0	0	0	0	0
1179	5	0	2	3	0	1	2	0	0
1180	2	0	1	1	0	1	0	0	0
1181	0	0	0	0	0	0	0	0	0
1182	8	4	1	3	0	1	2	0	0
1183	6	5	1	0	0	0	0	0	0
1184	10	0	1	9	0	3	5	0	1
1185	9	0	1	8	0	2	2	2	4
1186	2	2	0	0	0	0	0	0	0
1187	7	4	1	2	0	1	0	0	1
1188	9	5	0	4	0	2	1	0	1
1189	2	1	1	0	0	0	0	0	0
1190	4	2	1	1	0	0	1	0	0
1191	6	6	0	0	0	0	0	0	0
1192	8	0	0	8	0	3	2	0	3
1193	8	0	0	8	0	2	4	5	0
1194	3	3	0	0	0	0	0	0	0
1195	2	0	1	1	0	0	1	0	0
1196	18	10	6	2	0	1	1	0	0
1197	6	6	0	0	0	0	0	0	0
1198	6	0	1	5	0	0	1	0	4
1199	6	6	0	0	0	0	0	0	0
1200	11	10	0	1	0	0	1	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
1201	12	9	2	1	0	0	0	0	1
1202	9	7	1	1	0	1	0	0	0
1203	8	1	1	6	0	1	3	0	2
1204	2	0	0	2	0	1	0	0	1
1205	6	0	0	6	0	1	1	0	4
1206	6	0	1	5	0	2	2	0	1
1207	4	4	0	0	0	0	0	0	0
1208	4	4	0	0	0	0	0	0	0
1209	5	0	1	4	0	1	1	0	2
1210	7	7	0	0	0	0	0	0	0
1211	4	2	2	0	0	0	0	0	0
1212	5	5	0	0	0	0	0	0	0
1213	4	2	1	1	0	0	0	0	1
1214	11	8	2	1	0	1	0	0	0
1215	6	0	0	6	0	4	1	0	1
1216	6	0	0	6	0	0	0	0	6
1217	16	0	0	16	0	5	7	0	4
1218	8	0	1	7	0	2	3	0	2
1219	5	2	1	2	0	1	1	0	0
1220	3	0	0	3	0	1	1	0	1
1221	4	0	0	4	0	2	2	0	0
1222	10	10	0	0	0	0	0	0	0
1223	6	0	1	5	0	1	2	0	2
1224	6	6	0	0	0	0	0	0	0
1225	5	0	0	5	0	1	2	0	2
1226	9	2	3	4	0	1	1	0	2
1227	6	3	0	3	0	0	2	0	1
1228	3	0	0	3	0	1	1	0	1
1229	4	3	1	0	0	0	0	0	0
1230	6	0	1	5	0	2	1	0	2
1231	5	1	1	3	0	1	1	0	1
1232	2	2	0	0	0	0	0	0	0
1233	13	9	4	0	0	0	0	0	0
1234	9	6	3	0	0	0	0	0	0
1235	12	0	0	12	0	5	5	0	2
1236	7	3	1	3	0	2	1	0	0
1237	7	7	0	0	0	0	0	0	0
1238	3	3	0	0	0	0	0	0	0
1239	4	4	0	0	0	0	0	0	0
1240	5	5	0	0	0	0	0	0	0
1241	6	6	0	0	0	0	0	0	0
1242	2	2	0	0	0	0	0	0	0
1243	8	6	2	0	0	0	0	0	0
1244	5	4	1	0	0	0	0	0	0
1245	2	2	0	0	0	0	0	0	0
1246	7	5	2	0	0	0	0	0	0
1247	2	2	0	0	0	0	0	0	0
1248	0	0	0	0	0	0	0	0	0
1249	7	4	0	3	0	0	1	0	2
1250	6	3	2	1	0	0	0	0	1
1251	0	0	0	0	0	0	0	0	0
1252	4	2	1	1	0	1	0	0	0
1253	2	1	0	1	0	1	0	0	0
1254	7	7	0	0	0	0	0	0	0
1255	5	5	0	0	0	0	0	0	0
1256	5	4	0	1	0	1	0	0	0
1257	0	0	0	0	0	0	0	0	0
1258	7	7	0	0	0	0	0	0	0
1259	8	6	0	2	0	0	1	0	1
1260	0	0	0	0	0	0	0	0	0
1261	5	4	1	0	0	0	0	0	0
1262	3	3	0	0	0	0	0	0	0
1263	4	4	0	0	0	0	0	0	0
1264	7	7	0	0	0	0	0	0	0
1265	9	0	1	8	0	0	4	0	4
1266	6	6	0	0	0	0	0	0	0
1267	6	3	1	2	0	1	1	0	0
1268	4	4	0	0	0	0	0	0	0
1269	6	6	0	0	0	0	0	0	0
1270	7	0	3	4	0	1	2	0	1
1271	5	5	0	0	0	0	0	0	0
1272	2	0	1	1	0	0	0	0	1
1273	7	0	0	7	0	1	3	0	3
1274	11	0	1	10	0	4	5	0	1
1275	9	3	2	4	0	2	2	0	0
1276	3	3	0	0	0	0	0	0	0
1277	8	8	0	0	0	0	0	0	0
1278	2	0	0	2	0	2	0	0	0
1279	6	0	0	6	0	1	2	0	3
1280	6	6	0	0	0	0	0	0	0
1281	2	2	0	0	0	0	0	0	0
1282	6	6	0	0	0	0	0	0	0
1283	7	7	0	0	0	0	0	0	0
1284	6	6	0	0	0	0	0	0	0
1285	8	8	0	0	0	0	0	0	0
1286	5	0	1	4	0	1	2	0	1
1287	4	1	0	3	0	1	1	0	1
1288	2	0	1	1	0	1	0	0	0
1289	2	2	0	0	0	0	0	0	0
1290	9	0	0	9	0	4	4	0	1
1291	4	2	2	0	0	0	0	0	0
1292	0	0	0	0	0	0	0	0	0
1293	7	1	0	6	0	2	2	0	2
1294	5	5	0	0	0	0	0	0	0
1295	2	2	0	0	0	0	0	0	0
1296	8	8	0	0	0	0	0	0	0
1297	10	0	0	10	0	5	1	0	4
1298	3	2	1	0	0	0	0	0	0
1299	6	0	0	6	0	1	2	0	3
1300	8	8	0	0	0	0	0	0	0
1301	11	10	1	0	0	0	0	0	0
1302	6	0	0	6	0	2	2	0	2
1303	4	4	0	0	0	0	0	0	0
1304	3	2	0	1	0	0	1	0	0
1305	6	0	2	4	0	0	1	0	3
1306	6	5	1	0	0	0	0	0	0
1307	7	0	2	5	0	3	2	0	0
1308	5	4	1	0	0	0	0	0	0
1309	6	6	0	0	0	0	0	0	0
1310	0	0	0	0	0	0	0	0	0
1311	11	3	1	7	0	3	2	0	2
1312	2	2	0	0	0	0	0	0	0
1313	4	0	0	4	0	1	1	0	2
1314	10	1	0	9	0	4	2	0	3
1315	5	5	0	0	0	0	0	0	0
1316	7	0	0	7	0	2	2	0	3
1317	4	0	0	4	0	0	1	0	3
1318	11	8	1	2	0	1	0	0	1
1319	6	0	0	6	0	1	3	0	2
1320	3	2	0	1	0	0	1	0	0
1321	4	1	0	3	0	1	2	0	0
1322	10	0	1	9	0	4	4	0	1
1323	2	2	0	0	0	0	0	0	0
1324	6	0	0	6	0	2	2	0	2
1325	7	4	1	2	0	1	0	0	1
1326	1	1	0	0	0	0	0	0	0
1327	4	2	1	1	0	0	1	0	0
1328	6	6	0	0	0	0	0	0	0
1329	4	0	1	3	0	0	2	0	1
1330	12	11	1	0	0	0	0	0	0
1331	6	6	0	0	0	0	0	0	0
1332	5	3	2	0	0	0	0	0	0
1333	4	0	2	2	0	0	1	0	1
1334	8	6	1	1	0	1	0	0	0
1335	5	0	0	5	0	3	2	0	0
1336	2	1	0	1	0	1	0	0	0
1337	12	11	1	0	0	0	0	0	0
1338	6	0	0	6	0	1	2	0	3
1339	7	2	4	1	0	0	1	0	0
1340	4	2	0	2	0	0	1	0	1
1341	7	7	0	0	0	0	0	0	0
1342	11	10	1	0	0	0	0	0	0
1343	3	1	1	1	0	0	1	0	0
1344	4	0	0	4	0	2	1	0	1
1345	7	4	2	1	0	1	0	0	0
1346	2	0	2	0	0	0	0	0	0
1347	9	6	2	1	0	0	1	0	0
1348	3	0	0	3	0	0	1	0	2
1349	1	0	0	1	0	0	1	0	0
1350	2	2	0	0	0	0	0	0	0

IMPS Statistics Catalog

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1353	7	6	1	0	0	0	0	0	0
1354	6	5	1	0	0	0	0	0	0
1355	8	0	0	8	0	4	4	0	0
1356	4	4	0	0	0	0	0	0	0
1357	6	4	1	1	0	1	0	0	0
1358	2	2	0	0	0	0	0	0	0
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1360	7	4	3	0	0	0	0	0	0
1361	9	5	2	2	0	1	1	0	0
1362	2	2	0	0	0	0	0	0	0
1363	7	0	0	7	0	2	2	0	3
1364	5	0	1	4	0	2	2	0	0
1365	3	0	1	2	0	1	1	0	0
1366	7	3	1	3	0	1	2	0	0
1367	4	0	1	3	0	0	2	0	1
1368	9	5	2	2	0	0	0	0	2
1369	5	5	0	0	0	0	0	0	0
1370	2	0	0	2	0	1	0	0	1
1371	1	0	1	0	0	0	0	0	0
1372	3	2	0	1	0	0	0	0	1
1373	13	0	0	13	0	5	5	0	3
1374	2	0	0	2	0	0	0	0	2
1375	6	0	1	5	0	3	1	0	1
1376	4	0	0	4	0	2	0	0	2
1377	13	0	0	13	0	4	3	0	6
1378	2	2	0	0	0	0	0	0	0
1379	3	0	1	2	0	1	0	0	1
1380	7	0	3	4	0	2	1	0	1
1381	5	0	3	2	0	1	1	0	0
1382	2	0	0	2	0	0	1	0	1
1383	11	9	2	0	0	0	0	0	0
1384	3	3	0	0	0	0	0	0	0
1385	4	2	2	0	0	0	0	0	0
1386	3	0	0	3	0	1	2	0	0
1387	2	0	0	2	0	0	0	0	2
1388	2	1	1	0	0	0	0	0	0
1389	7	0	1	6	0	1	3	0	2
1390	4	4	0	0	0	0	0	0	0
1391	7	0	0	7	0	2	2	0	3
1392	8	3	1	4	0	0	3	0	1
1393	2	0	0	2	0	1	1	0	0
1394	3	0	0	3	0	0	1	0	2
1395	6	0	2	4	0	1	1	0	2
1396	16	3	4	9	0	1	7	0	1
1397	4	0	1	3	0	2	0	0	1
1398	6	1	0	5	0	0	3	0	2
1399	3	0	0	3	0	0	2	0	1
1400	1	0	0	1	0	1	0	0	0

ID/1	P	S	R	M	F	D	N	G	X
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1402	4	0	0	4	0	1	1	0	2
1403	4	2	1	1	0	1	0	0	0
1404	7	6	1	0	0	0	0	0	0
1405	9	2	0	7	0	0	3	0	4
1406	9	6	1	2	0	1	1	0	0
1407	9	6	3	0	0	0	0	0	0
1408	8	5	1	2	0	0	0	0	2
1409	6	6	0	0	0	0	0	0	0
1410	2	1	0	1	0	1	0	0	0
1411	15	14	0	1	0	1	0	0	0
1412	4	0	1	3	0	0	1	0	2
1413	2	2	0	0	0	0	0	0	0
1414	5	3	1	1	0	1	0	0	0
1415	7	2	0	5	0	1	2	0	2
1416	2	1	0	1	0	0	0	0	1
1417	5	0	0	5	0	1	1	0	3
1418	12	2	2	8	0	1	3	0	4
1419	6	0	2	4	0	1	1	0	2
1420	6	0	4	2	0	1	0	0	1
1421	3	1	2	0	0	0	0	0	0
1422	10	0	0	10	0	4	2	0	4
1423	8	2	3	3	0	0	1	0	2
1424	5	5	0	0	0	0	0	0	0
1425	7	3	1	3	0	1	2	0	0
1426	10	6	2	2	0	1	1	0	0
1427	11	11	0	0	0	0	0	0	0
1428	4	4	0	0	0	0	0	0	0
1429	2	0	0	2	0	1	1	0	0
1430	2	0	0	2	0	1	1	0	0
1431	8	0	1	7	0	1	3	0	3
1432	4	0	1	3	0	0	2	0	1
1433	8	0	1	7	0	3	3	0	1
1434	6	4	0	2	0	2	0	0	0
1435	9	3	0	6	0	1	4	0	1
1436	4	4	0	0	0	0	0	0	0
1437	7	6	1	0	0	0	0	0	0
1438	0	0	0	0	0	0	0	0	0
1439	5	2	2	1	0	0	0	0	1
1440	2	0	0	2	0	1	1	0	0
1441	9	1	0	8	0	3	2	6	1
1442	4	0	0	4	0	2	2	0	0
1443	4	0	0	4	0	2	2	0	0
1444	4	2	0	2	0	0	0	0	2
1445	6	0	0	6	0	1	3	0	2
1446	4	0	0	4	0	1	2	0	1
1447	7	0	1	6	0	2	2	0	2
1448	7	2	2	3	0	0	0	0	3
1449	2	0	0	2	0	1	1	0	0
1450	3	3	0	0	0	0	0	0	0

ID/1	P	S	R	M	F	D	N	G	X
1451	0	0	0	0	0	0	0	0	0
1452	9	0	0	9	0	1	4	0	4
1453	6	3	1	2	0	1	0	0	1
1454	5	0	0	5	0	2	1	0	2
1455	10	0	0	10	0	5	2	0	3
1456	8	8	0	0	0	0	0	0	0
1457	2	0	0	2	0	1	0	0	1
1458	9	7	0	2	0	1	1	0	0
1459	4	1	0	3	0	2	0	0	1
1460	4	0	0	4	0	1	2	0	1
1461	6	4	2	0	0	0	0	0	0
1462	7	4	0	3	0	1	1	0	1
1463	4	4	0	0	0	0	0	0	0
1464	5	0	2	3	0	1	0	0	2
1465	2	0	0	2	0	0	0	0	2
1466	9	7	2	0	0	0	0	0	0
1467	0	0	0	0	0	0	0	0	0
1468	5	0	1	4	0	2	1	0	1
1469	9	8	0	1	0	0	0	0	1
1470	8	8	0	0	0	0	0	0	0
1471	8	7	1	0	0	0	0	0	0
1472	5	0	0	5	0	1	3	0	1
1473	11	6	2	3	0	1	2	0	0
1474	6	0	0	6	0	3	2	0	1
1475	6	0	2	4	0	1	1	0	2
1476	4	0	0	4	0	2	1	0	1
1477	4	4	0	0	0	0	0	0	0
1478	1	0	0	1	0	0	0	0	1
1479	10	0	1	9	0	4	3	0	2
1480	0	0	0	0	0	0	0	0	0
1481	2	2	0	0	0	0	0	0	0
1482	7	0	1	6	0	3	3	0	0
1483	8	0	0	8	0	3	3	0	2
1484	4	4	0	0	0	0	0	0	0
1485	7	0	0	7	0	3	3	0	1
1486	10	0	0	10	0	3	1	0	6
1487	2	2	0	0	0	0	0	0	0
1488	9	0	1	8	0	1	3	0	4
1489	8	3	1	4	0	1	1	0	2
1490	9	7	1	1	0	0	1	0	0
1491	5	0	1	4	0	1	2	0	1
1492	6	1	0	5	0	1	2	0	2
1493	8	4	2	2	0	1	0	0	1
1494	11	0	1	10	0	3	3	0	4
1495	4	2	0	2	0	1	1	0	0
1496	6	0	0	6	0	2	2	0	2
1497	2	0	0	2	0	1	1	0	0
1498	2	0	1	1	0	0	0	0	1
1499	13	0	1	12	0	3	3	0	6
1500	6	0	0	6	0	2	2	0	2

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
1501	3	1	1	1	0	1	0	0	0
1502	6	4	2	0	0	0	0	0	0
1503	7	3	1	3	0	0	2	0	1
1504	5	2	1	2	0	0	0	0	2
1505	14	11	1	2	0	0	2	0	0
1506	4	0	0	4	0	0	2	0	2
1507	5	0	0	5	0	2	3	0	0
1508	8	0	1	7	0	3	4	0	0
1509	15	1	4	10	0	5	2	0	3
1510	9	6	1	2	0	1	0	0	1
1511	12	3	4	5	0	1	3	2	0
1512	17	15	2	0	0	0	0	0	0
1513	6	0	0	6	0	1	1	0	4
1514	8	0	1	7	0	2	1	0	4
1515	4	0	0	4	0	1	0	0	3
1516	2	2	0	0	0	0	0	0	0
1517	8	7	1	0	0	0	0	0	0
1518	7	0	0	7	0	2	3	0	2
1519	2	2	0	0	0	0	0	0	0
1520	8	8	0	0	0	0	0	0	0
1521	4	0	0	4	0	1	2	0	1
1522	5	0	0	5	0	2	3	0	0
1523	9	0	0	9	0	3	3	0	3
1524	5	5	0	0	0	0	0	0	0
1525	7	3	2	2	0	0	1	0	1
1526	2	0	0	2	0	0	0	0	2
1527	2	0	0	2	0	1	1	0	0
1528	6	0	1	5	0	2	3	0	0
1529	0	0	0	0	0	0	0	0	0
1530	0	0	0	0	0	0	0	0	0
1531	4	0	1	3	0	2	0	0	1
1532	7	3	0	4	0	0	2	0	2
1533	5	4	0	1	0	0	0	0	1
1534	3	2	1	0	0	0	0	0	0
1535	8	7	0	1	0	1	0	0	0
1536	5	0	0	5	0	2	2	0	1
1537	7	6	0	1	0	0	1	0	0
1538	12	0	2	10	0	2	5	0	3
1539	6	0	1	5	0	3	1	0	1
1540	6	5	1	0	0	0	0	0	0
1541	6	4	1	1	0	0	0	0	1
1542	9	7	1	1	0	0	0	0	1
1543	6	0	0	6	0	2	3	0	1
1544	1	1	0	0	0	0	0	0	0
1545	2	2	0	0	0	0	0	0	0
1546	4	0	1	3	0	1	1	0	1
1547	2	0	0	2	0	1	1	0	0
1548	4	3	0	1	0	1	0	0	0
1549	8	2	2	4	0	1	2	0	1
1550	8	0	1	7	0	2	3	0	2
1551	13	0	2	11	0	5	4	0	2
1552	2	1	0	1	0	0	1	0	0
1553	2	0	0	2	0	1	0	0	1
1554	2	0	1	1	0	0	0	0	1
1555	4	0	0	4	0	2	2	0	0
1556	6	4	1	1	0	1	0	0	0
1557	3	0	0	3	0	2	1	0	0
1558	2	2	0	0	0	0	0	0	0
1559	7	0	1	6	0	2	3	0	1
1560	8	0	3	5	0	2	3	0	0
1561	4	2	0	2	0	0	1	0	1
1562	7	2	1	4	0	2	2	0	0
1563	5	0	0	5	0	2	2	0	1
1564	0	0	0	0	0	0	0	0	0
1565	2	0	0	2	0	1	1	0	0
1566	6	0	1	5	0	0	1	0	4
1567	4	4	0	0	0	0	0	0	0
1568	1	0	0	1	0	1	0	0	0
1569	2	2	0	0	0	0	0	0	0
1570	9	0	1	8	0	1	2	0	5
1571	5	1	0	4	0	2	2	0	0
1572	2	1	0	1	0	0	0	0	1
1573	6	2	0	4	0	3	0	0	1
1574	10	9	1	0	0	0	0	0	0
1575	9	1	1	7	0	3	2	0	2
1576	4	2	0	2	0	0	1	0	1
1577	4	0	0	4	0	2	1	0	1
1578	7	5	2	0	0	0	0	0	0
1579	8	6	0	2	0	1	1	0	0
1580	14	0	1	13	0	7	4	0	2
1581	4	4	0	0	0	0	0	0	0
1582	6	5	1	0	0	0	0	0	0
1583	11	8	3	0	0	0	0	0	0
1584	6	3	1	2	0	1	1	0	0
1585	2	2	0	0	0	0	0	0	0
1586	2	1	0	1	0	1	0	0	0
1587	6	0	1	5	0	2	1	0	2
1588	7	0	1	6	0	1	2	0	3
1589	8	0	0	8	0	1	1	0	6
1590	12	6	3	3	0	2	0	0	1
1591	4	1	2	1	0	1	0	0	0
1592	12	4	2	6	0	1	4	0	1
1593	5	0	1	4	0	3	0	0	1
1594	8	5	1	2	0	0	2	0	0
1595	3	2	1	0	0	0	0	0	0
1596	10	10	0	0	0	0	0	0	0
1597	11	0	2	9	0	2	5	0	2
1598	10	2	0	8	0	4	3	0	1
1599	5	4	1	0	0	0	0	0	0
1600	0	0	0	0	0	0	0	0	0
1601	7	0	0	7	0	3	3	0	1
1602	9	0	3	6	0	1	3	0	2
1603	6	5	1	0	0	0	0	0	0
1604	5	2	1	2	0	0	0	0	2
1605	4	3	0	1	0	0	1	0	0
1606	5	0	1	4	0	1	1	0	2
1607	3	2	1	0	0	0	0	0	0
1608	0	0	0	0	0	0	0	0	0
1609	6	4	2	0	0	0	0	0	0
1610	7	0	0	7	0	1	2	0	4
1611	7	0	0	7	0	3	3	0	1
1612	0	0	0	0	0	0	0	0	0
1613	3	3	0	0	0	0	0	0	0
1614	4	4	0	0	0	0	0	0	0
1615	7	5	1	1	0	0	1	0	0
1616	2	2	0	0	0	0	0	0	0
1617	5	0	1	4	0	0	3	0	1
1618	6	2	0	4	0	0	2	0	2
1619	4	0	0	4	0	1	1	0	2
1620	8	1	0	7	0	3	4	0	0
1621	2	1	0	1	0	0	1	0	0
1622	6	0	1	5	0	2	2	0	1
1623	0	0	0	0	0	0	0	0	0
1624	3	1	1	1	0	0	0	0	1
1625	2	0	0	2	0	0	0	0	2
1626	6	0	1	5	0	3	0	0	2
1627	2	0	0	2	0	0	1	0	1
1628	4	4	0	0	0	0	0	0	0
1629	6	1	0	5	0	3	2	0	0
1630	13	4	2	7	0	0	3	0	4
1631	2	1	0	1	0	0	0	0	1
1632	2	1	0	1	0	0	1	0	0
1633	2	1	1	0	0	0	0	0	0
1634	2	0	0	2	0	1	1	0	0
1635	7	0	2	5	0	2	1	0	2
1636	10	2	2	6	0	4	0	0	2
1637	10	3	4	3	0	2	1	0	0
1638	5	0	0	5	0	2	2	0	1
1639	7	3	1	3	0	1	1	1	1
1640	2	0	0	2	0	1	1	0	0
1641	7	6	1	0	0	0	0	0	0
1642	5	0	2	3	0	1	1	0	1
1643	3	0	2	1	0	0	1	0	0
1644	2	0	0	2	0	1	0	0	1
1645	3	2	1	0	0	0	0	0	0
1646	5	0	2	3	0	0	2	0	1
1647	6	0	0	6	0	1	3	0	2
1648	2	0	0	2	0	1	1	0	0
1649	7	0	0	7	0	1	3	0	3
1650	2	2	0	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
1651	0	0	0	0	0	0	0	0	0
1652	3	0	0	3	0	1	1	0	1
1653	10	0	1	9	0	3	5	0	1
1654	2	1	0	1	0	0	0	0	1
1655	7	3	0	4	0	1	2	0	1
1656	9	2	1	6	0	2	3	0	1
1657	13	0	3	10	0	5	2	0	3
1658	3	0	1	2	0	1	1	0	0
1659	4	2	1	1	0	0	0	0	1
1660	18	0	4	14	0	6	4	0	4
1661	10	0	2	8	0	2	4	0	2
1662	2	0	0	2	0	0	1	0	1
1663	11	2	0	9	0	4	2	0	3
1664	6	0	0	6	0	1	0	0	5
1665	6	0	1	5	0	3	1	0	1
1666	0	0	0	0	0	0	0	0	0
1667	2	0	0	2	0	1	0	0	1
1668	2	0	0	2	0	0	0	0	2
1669	9	6	2	1	0	1	0	0	0
1670	9	0	4	5	0	1	3	0	1
1671	5	0	0	5	0	1	2	2	1
1672	7	0	2	5	0	2	2	0	1
1673	6	0	1	5	0	1	3	0	1
1674	5	3	1	1	0	0	1	0	0
1675	6	4	0	2	0	1	0	0	1
1676	6	0	0	6	0	3	2	0	1
1677	0	0	0	0	0	0	0	0	0
1678	7	5	1	1	0	0	1	0	0
1679	2	2	0	0	0	0	0	0	0
1680	7	3	0	4	0	0	2	0	2
1681	5	0	0	5	0	1	3	0	1
1682	2	0	0	2	0	1	0	0	1
1683	2	0	0	2	0	0	1	0	1
1684	9	4	0	5	0	1	4	0	0
1685	12	0	4	8	0	4	1	0	3
1686	5	0	3	2	0	0	2	0	0
1687	2	2	0	0	0	0	0	0	0
1688	2	0	0	2	0	0	0	0	2
1689	16	0	2	14	0	4	8	0	2
1690	10	4	1	5	0	2	2	0	1
1691	7	0	3	4	0	2	2	0	0
1692	4	4	0	0	0	0	0	0	0
1693	2	2	0	0	0	0	0	0	0
1694	3	0	2	1	0	0	1	0	0
1695	2	2	0	0	0	0	0	0	0
1696	5	0	0	5	0	1	2	0	2
1697	9	0	1	8	0	3	4	0	1
1698	2	2	0	0	0	0	0	0	0
1699	8	0	1	7	0	2	2	0	3
1700	8	5	2	1	0	0	0	0	1
1701	2	1	0	1	0	0	0	0	1
1702	2	2	0	0	0	0	0	0	0
1703	8	4	0	4	0	0	0	0	4
1704	3	0	0	3	0	1	1	0	1
1705	7	5	0	2	0	2	0	0	0
1706	8	0	0	8	0	3	2	0	3
1707	9	0	0	9	0	5	3	0	1
1708	7	3	2	2	0	1	1	0	0
1709	9	0	1	8	0	1	3	0	4
1710	14	0	2	12	0	2	7	0	3
1711	4	0	0	4	0	1	1	0	2
1712	2	2	0	0	0	0	0	0	0
1713	5	0	0	5	0	2	2	0	1
1714	6	1	1	4	0	0	3	0	1
1715	10	10	0	0	0	0	0	0	0
1716	8	8	0	0	0	0	0	0	0
1717	7	0	1	6	0	1	2	0	3
1718	2	0	0	2	0	0	1	0	1
1719	2	2	0	0	0	0	0	0	0
1720	0	0	0	0	0	0	0	0	0
1721	4	4	0	0	0	0	0	0	0
1722	8	0	1	7	0	1	4	0	2
1723	5	5	0	0	0	0	0	0	0
1724	6	6	0	0	0	0	0	0	0
1725	8	0	0	8	0	2	4	0	2
1726	7	3	1	3	0	1	1	0	1
1727	11	0	0	11	0	2	4	0	5
1728	5	0	0	5	0	1	3	0	1
1729	3	0	0	3	0	1	2	0	0
1730	2	0	0	2	0	1	1	0	0
1731	6	5	0	1	0	0	0	0	1
1732	2	2	0	0	0	0	0	0	0
1733	0	0	0	0	0	0	0	0	0
1734	7	6	1	0	0	0	0	0	0
1735	3	3	0	0	0	0	0	0	0
1736	9	0	0	9	0	2	4	0	3
1737	4	1	0	3	0	0	2	0	1
1738	5	0	0	5	0	1	2	0	2
1739	10	0	1	9	0	2	3	0	4
1740	4	0	0	4	0	1	1	0	2
1741	4	0	1	3	0	1	2	0	0
1742	6	2	2	2	0	0	1	0	1
1743	5	2	2	1	0	0	1	0	0
1744	11	0	0	11	0	3	7	0	1
1745	8	0	2	6	0	3	3	2	0
1746	3	1	0	2	0	0	1	0	1
1747	9	2	1	6	0	2	3	0	1
1748	2	0	0	2	0	1	1	0	0
1749	8	2	2	4	0	1	1	0	2
1750	0	0	0	0	0	0	0	0	0
1751	6	0	2	4	0	2	2	0	0
1752	8	0	0	8	0	3	2	0	3
1753	2	0	1	1	0	0	1	0	0
1754	8	8	0	0	0	0	0	0	0
1755	14	4	4	6	0	2	4	0	0
1756	4	0	0	4	0	1	1	0	2
1757	7	0	1	6	0	1	2	0	3
1758	4	0	1	3	0	1	2	0	0
1759	6	0	0	6	0	2	3	0	1
1760	5	5	0	0	0	0	0	0	0
1761	4	0	0	4	0	0	1	0	3
1762	3	0	1	2	0	1	1	0	0
1763	2	0	0	2	0	0	0	0	2
1764	6	5	0	1	0	1	0	0	0
1765	8	8	0	0	0	0	0	0	0
1766	6	0	1	5	0	1	2	0	2
1767	5	0	2	3	0	2	1	0	0
1768	7	2	1	4	0	1	2	0	1
1769	2	0	0	2	0	1	1	0	0
1770	8	0	1	7	0	3	2	0	2
1771	6	5	0	1	0	0	1	0	0
1772	2	0	0	2	0	0	1	0	1
1773	3	0	0	3	0	1	2	0	0
1774	2	0	0	2	0	0	0	0	2
1775	2	0	0	2	0	0	1	0	1
1776	4	3	1	0	0	0	0	0	0
1777	6	0	0	6	0	2	4	0	0
1778	6	0	1	5	0	1	3	0	1
1779	0	0	0	0	0	0	0	0	0
1780	11	8	2	1	0	1	0	0	0
1781	7	0	0	7	0	2	2	2	1
1782	6	0	4	2	0	0	0	0	2
1783	10	2	4	4	0	1	1	0	2
1784	9	2	3	4	0	1	2	0	1
1785	1	0	0	1	0	1	0	0	0
1786	8	0	3	5	0	2	1	0	2
1787	4	0	1	3	0	0	1	0	2
1788	5	0	0	5	0	2	3	0	0
1789	2	0	0	2	0	1	0	0	1
1790	0	0	0	0	0	0	0	0	0
1791	7	4	1	2	0	1	0	0	1
1792	4	0	0	4	0	1	2	0	1
1793	2	0	0	2	0	1	1	0	0
1794	5	2	2	1	0	0	0	0	1
1795	3	3	0	0	0	0	0	0	0
1796	4	4	0	0	0	0	0	0	0
1797	3	0	0	3	0	1	1	0	1
1798	6	0	0	6	0	3	2	0	1
1799	2	1	0	1	0	0	1	0	0
1800	2	0	0	2	0	1	1	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
1801	6	1	0	5	0	1	1	0	3
1802	5	0	0	5	0	2	2	0	1
1803	7	0	1	6	0	2	2	0	2
1804	1	0	0	1	0	0	1	0	0
1805	5	1	1	3	0	1	1	0	1
1806	0	0	0	0	0	0	0	0	0
1807	4	0	0	4	0	1	1	0	2
1808	9	5	2	2	0	1	0	0	1
1809	6	0	0	6	0	2	2	0	2
1810	5	0	0	5	0	0	2	0	3
1811	2	0	2	0	0	0	0	0	0
1812	8	2	1	5	0	0	5	0	0
1813	3	1	2	0	0	0	0	0	0
1814	9	0	0	9	0	3	4	0	2
1815	6	3	1	2	0	1	0	0	1
1816	11	0	1	10	0	3	5	0	2
1817	10	7	3	0	0	0	0	0	0
1818	10	0	0	10	0	3	3	0	4
1819	2	2	0	0	0	0	0	0	0
1820	3	0	0	3	0	1	2	0	0
1821	7	0	2	5	0	2	0	0	3
1822	3	0	0	3	0	1	2	0	0
1823	7	0	1	6	0	2	1	0	3
1824	5	0	0	5	0	1	3	0	1
1825	7	0	1	6	0	1	1	0	4
1826	5	2	1	2	0	0	1	0	1
1827	5	0	1	4	0	1	3	3	0
1828	2	2	0	0	0	0	0	0	0
1829	8	0	0	8	0	3	4	0	1
1830	3	0	0	3	0	2	1	0	0
1831	2	0	0	2	0	1	1	0	0
1832	4	2	1	1	0	0	1	0	0
1833	3	0	0	3	0	1	0	0	2
1834	4	0	0	4	0	1	1	0	2
1835	6	0	2	4	0	1	2	0	1
1836	6	0	0	6	0	3	2	0	1
1837	5	0	0	5	0	2	3	0	0
1838	2	2	0	0	0	0	0	0	0
1839	4	0	0	4	0	1	1	0	2
1840	6	0	2	4	0	1	2	0	1
1841	4	3	1	0	0	0	0	0	0
1842	8	0	2	6	0	3	1	0	2
1843	9	8	1	0	0	0	0	0	0
1844	3	0	0	3	0	1	2	0	0
1845	2	0	0	2	0	0	0	0	2
1846	5	3	1	1	0	0	1	0	0
1847	5	2	2	1	0	1	0	0	0
1848	1	0	0	1	0	0	1	0	0
1849	2	0	0	2	0	1	0	0	1
1850	9	0	0	9	0	2	2	0	5
1851	6	3	1	2	0	1	1	0	0
1852	5	2	1	2	0	0	2	0	0
1853	5	5	0	0	0	0	0	0	0
1854	11	0	0	11	0	3	3	0	5
1855	2	0	0	2	0	1	1	0	0
1856	2	0	0	2	0	1	1	0	0
1857	8	0	0	8	0	2	1	0	5
1858	6	0	0	6	0	2	3	0	1
1859	8	6	2	0	0	0	0	0	0
1860	4	0	0	4	0	1	2	0	1
1861	4	0	1	3	0	0	1	0	2
1862	6	0	1	5	5	0	2	0	0
1863	2	0	0	2	0	1	1	0	0
1864	4	0	0	4	0	1	1	0	2
1865	4	0	0	4	0	2	1	0	1
1866	0	0	0	0	0	0	0	0	0
1867	5	3	2	0	0	0	0	0	0
1868	0	0	0	0	0	0	0	0	0
1869	6	0	0	6	0	3	3	0	0
1870	4	0	0	4	0	1	1	0	2
1871	4	0	0	4	0	1	1	0	2
1872	4	0	0	4	0	1	2	0	1
1873	4	3	0	1	0	1	0	0	0
1874	4	0	1	3	0	0	0	0	3
1875	4	0	1	3	0	1	2	0	0
1876	0	0	0	0	0	0	0	0	0
1877	2	0	0	2	0	0	1	0	1
1878	10	1	0	9	0	2	4	0	3
1879	0	0	0	0	0	0	0	0	0
1880	13	2	0	11	0	3	4	0	4
1881	4	0	1	3	0	1	0	0	2
1882	2	0	1	1	0	1	0	0	0
1883	4	0	0	4	0	0	0	0	4
1884	8	3	1	4	0	0	1	0	3
1885	0	0	0	0	0	0	0	0	0
1886	14	0	2	12	0	4	4	0	4
1887	4	0	0	4	0	1	1	0	2
1888	10	0	1	9	0	5	2	0	2
1889	2	1	1	0	0	0	0	0	0
1890	7	5	1	1	0	0	1	0	0
1891	3	0	2	1	0	0	1	0	0
1892	3	0	0	3	0	0	2	0	1
1893	10	0	2	8	0	1	2	0	5
1894	4	0	0	4	0	0	2	0	2
1895	3	1	0	2	0	1	1	0	0
1896	2	0	1	1	0	0	0	0	1
1897	6	0	2	4	0	0	3	0	1
1898	1	0	0	1	0	1	0	0	0
1899	7	0	1	6	0	1	3	0	2
1900	6	0	0	6	0	2	0	3	3
1901	6	2	0	4	0	2	2	0	0
1902	2	2	0	0	0	0	0	0	0
1903	8	1	4	3	0	1	2	0	0
1904	3	1	0	2	0	1	0	0	1
1905	2	0	0	2	0	1	1	0	0
1906	6	0	0	6	0	2	2	0	2
1907	6	0	1	5	0	2	3	0	0
1908	2	2	0	0	0	0	0	0	0
1909	10	7	3	0	0	0	0	0	0
1910	0	0	0	0	0	0	0	0	0
1911	4	4	0	0	0	0	0	0	0
1912	5	0	0	5	0	1	3	0	1
1913	2	0	0	2	0	0	0	0	2
1914	2	0	0	2	0	0	0	0	2
1915	4	0	0	4	0	2	2	0	0
1916	6	0	2	4	0	0	1	0	3
1917	0	0	0	0	0	0	0	0	0
1918	6	0	1	5	0	1	1	0	3
1919	0	0	0	0	0	0	0	0	0
1920	7	0	0	7	0	3	3	0	1
1921	4	0	0	4	0	0	2	0	2
1922	4	0	0	4	0	2	1	0	1
1923	6	3	1	2	0	0	1	0	1
1924	5	3	1	1	0	0	0	0	1
1925	7	0	0	7	0	2	1	0	4
1926	11	0	1	10	0	3	2	2	5
1927	4	0	1	3	0	1	1	0	1
1928	4	0	0	4	0	2	1	0	1
1929	8	0	0	8	0	2	4	0	2
1930	6	6	0	0	0	0	0	0	0
1931	4	0	0	4	0	2	2	0	0
1932	0	0	0	0	0	0	0	0	0
1933	4	0	0	4	0	0	2	0	2
1934	15	6	2	7	0	2	2	0	3
1935	6	0	0	6	0	2	2	0	2
1936	5	5	0	0	0	0	0	0	0
1937	13	4	1	8	0	3	4	0	1
1938	0	0	0	0	0	0	0	0	0
1939	7	3	3	1	0	1	0	0	0
1940	10	10	0	0	0	0	0	0	0
1941	5	0	1	4	0	1	1	0	2
1942	2	1	0	1	0	0	0	0	1
1943	3	0	0	3	0	1	1	0	1
1944	3	0	0	3	0	1	2	0	0
1945	10	0	1	9	0	3	3	0	3
1946	8	0	4	4	0	2	0	0	2
1947	2	2	0	0	0	0	0	0	0
1948	6	0	0	6	0	2	1	0	3
1949	5	0	0	5	0	1	2	0	2
1950	0	0	0	0	0	0	0	0	0

ID/1	P	S	R	M	F	D	N	G	X
1951	10	2	3	5	0	2	0	0	3
1952	7	6	0	1	0	0	1	0	0
1953	7	0	1	6	0	2	3	0	1
1954	2	0	0	2	0	1	1	0	0
1955	2	0	0	2	0	1	0	0	1
1956	0	0	0	0	0	0	0	0	0
1957	2	0	0	2	0	0	1	0	1
1958	6	2	2	2	0	0	1	0	1
1959	9	0	0	9	0	2	3	0	4
1960	4	3	1	0	0	0	0	0	0
1961	9	8	1	0	0	0	0	0	0
1962	8	0	0	8	0	2	3	3	2
1963	11	11	0	0	0	0	0	0	0
1964	7	0	1	6	0	2	2	0	2
1965	5	0	0	5	0	1	2	0	2
1966	7	0	0	7	0	2	2	0	3
1967	8	0	1	7	0	2	4	0	1
1968	7	0	0	7	0	2	3	0	2
1969	7	2	0	5	0	3	2	0	0
1970	8	2	3	3	0	1	0	0	2
1971	4	0	0	4	0	2	2	0	0
1972	2	0	0	2	0	0	1	0	1
1973	0	0	0	0	0	0	0	0	0
1974	4	0	0	4	0	1	1	0	2
1975	9	0	3	6	0	1	4	0	1
1976	2	0	0	2	0	2	0	0	0
1977	8	0	2	6	0	2	3	0	1
1978	4	0	0	4	0	2	2	0	0
1979	0	0	0	0	0	0	0	0	0
1980	7	0	1	6	0	1	2	0	3
1981	3	0	0	3	0	1	2	0	0
1982	3	0	0	3	0	1	2	0	0
1983	6	0	0	6	0	2	3	0	1
1984	5	5	0	0	0	0	0	0	0
1985	2	2	0	0	0	0	0	0	0
1986	6	0	1	5	0	1	2	2	2
1987	5	0	2	3	0	1	1	0	1
1988	10	0	0	10	0	3	3	2	2
1989	0	0	0	0	0	0	0	0	0
1990	6	0	0	6	0	1	3	0	2
1991	6	0	0	6	0	2	3	0	1
1992	15	0	0	15	0	3	5	0	7
1993	10	0	1	9	0	3	3	0	3
1994	8	7	1	0	0	0	0	0	0
1995	7	0	1	6	0	1	3	0	2
1996	3	0	0	3	0	1	2	0	0
1997	2	2	0	0	0	0	0	0	0
1998	4	0	0	4	0	1	1	0	2
1999	2	1	1	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0	0
2002	2	2	0	0	0	0	0	0	0
2003	2	0	1	1	0	1	0	0	0
2004	2	0	0	2	0	0	0	0	2
2005	4	0	0	4	0	2	0	0	2
2006	7	0	2	5	0	1	2	3	0
2007	5	4	1	0	0	0	0	0	0
2008	7	6	1	0	0	0	0	0	0
2009	6	2	1	3	0	2	1	0	0
2010	4	0	0	4	0	0	1	0	3
2011	6	0	0	6	0	3	2	0	1
2012	0	0	0	0	0	0	0	0	0
2013	6	0	1	5	0	0	3	0	2
2014	5	0	0	5	0	3	1	0	1
2015	4	0	3	1	0	1	0	0	0
2016	8	5	2	1	0	0	0	0	1
2017	4	0	0	4	0	0	1	0	3
2018	2	0	0	2	0	1	1	0	0
2019	2	0	0	2	0	1	1	0	0
2020	5	2	0	3	0	1	2	0	0
2021	2	0	0	2	0	0	1	0	1
2022	4	0	1	3	0	1	0	0	2
2023	5	0	1	4	0	1	1	0	2
2024	6	0	0	6	0	2	3	0	1
2025	2	2	0	0	0	0	0	0	0
2026	3	0	0	3	0	1	2	0	0
2027	5	0	0	5	0	2	3	0	0
2028	2	0	0	2	0	0	0	0	2
2029	9	0	2	7	0	1	1	0	5
2030	3	0	0	3	0	1	2	0	0
2031	3	0	0	3	0	1	2	0	0
2032	6	3	1	2	0	0	1	0	1
2033	4	0	0	4	0	2	2	0	0
2034	2	0	0	2	0	0	1	0	1
2035	8	0	0	8	0	2	4	0	2
2036	6	0	0	6	0	2	1	0	3
2037	12	0	0	12	0	2	5	0	5
2038	15	1	0	14	0	5	7	0	2
2039	4	1	0	3	0	1	0	0	2
2040	0	0	0	0	0	0	0	0	0
2041	2	1	1	0	0	0	0	0	0
2042	5	0	0	5	0	2	1	0	2
2043	6	5	1	0	0	0	0	0	0
2044	3	0	1	2	0	1	0	0	1
2045	2	0	1	1	0	0	0	0	1
2046	8	0	2	6	0	1	3	0	2
2047	12	0	1	11	0	3	6	0	2
2048	4	0	0	4	0	1	2	0	1
2049	4	0	0	4	0	2	2	0	0
2050	14	0	1	13	0	5	3	0	5
2051	4	0	0	4	0	0	2	0	2
2052	4	2	0	2	0	0	1	0	1
2053	11	0	3	8	0	3	5	0	0
2054	5	1	1	3	0	1	1	0	1
2055	2	0	0	2	0	1	1	0	0
2056	7	0	1	6	0	2	4	0	0
2057	7	1	1	5	0	2	2	0	1
2058	6	3	2	1	0	0	1	0	0
2059	4	0	0	4	0	2	1	0	1
2060	2	0	0	2	0	0	1	0	1
2061	4	0	0	4	0	1	2	0	1
2062	0	0	0	0	0	0	0	0	0
2063	0	0	0	0	0	0	0	0	0
2064	7	1	0	6	0	3	3	0	0
2065	6	0	0	6	0	3	3	0	0
2066	4	1	1	2	0	0	0	0	2
2067	4	2	2	0	0	0	0	0	0
2068	6	5	0	1	0	1	0	0	0
2069	6	6	0	0	0	0	0	0	0
2070	3	0	0	3	0	1	1	0	1
2071	5	0	0	5	0	1	2	0	2
2072	4	0	0	4	0	2	2	0	0
2073	0	0	0	0	0	0	0	0	0
2074	11	0	2	9	0	2	7	0	0
2075	8	0	0	8	0	2	1	0	5
2076	7	0	2	5	0	0	1	0	4
2077	4	0	0	4	0	1	2	0	1
2078	4	0	0	4	0	0	2	0	2
2079	4	0	0	4	0	2	2	0	0
2080	5	0	0	5	0	0	3	0	2
2081	6	5	0	1	0	1	0	0	0
2082	4	0	2	2	0	2	0	0	0
2083	5	0	1	4	0	2	2	0	0
2084	8	7	0	1	0	0	1	0	0
2085	2	0	0	2	0	1	1	0	0
2086	7	0	0	7	0	2	2	0	3
2087	0	0	0	0	0	0	0	0	0
2088	8	0	0	8	0	3	2	0	3
2089	5	0	1	4	0	2	1	0	1
2090	4	0	0	4	0	1	1	0	2
2091	10	6	1	3	0	0	1	0	2
2092	4	0	0	4	0	1	2	0	1
2093	2	0	1	1	0	1	0	0	0
2094	7	2	0	5	0	4	1	0	0
2095	2	0	0	2	0	1	1	0	0
2096	4	0	0	4	0	2	1	0	1
2097	4	0	1	3	0	2	1	0	0
2098	9	0	0	9	0	2	3	0	4
2099	6	0	0	6	0	1	2	0	3
2100	0	0	0	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
2101	4	0	0	4	0	2	2	0	0
2102	0	0	0	0	0	0	0	0	0
2103	7	2	3	2	0	0	1	0	1
2104	0	0	0	0	0	0	0	0	0
2105	8	8	0	0	0	0	0	0	0
2106	4	0	0	4	0	1	2	0	1
2107	11	2	1	8	0	1	2	0	5
2108	3	2	0	1	0	0	1	0	0
2109	4	0	0	4	0	1	1	0	2
2110	6	0	0	6	0	3	3	0	0
2111	4	1	1	2	0	0	1	0	1
2112	2	0	0	2	0	1	1	0	0
2113	7	0	0	7	0	1	3	0	3
2114	4	1	0	3	0	0	1	0	2
2115	6	2	1	3	0	0	0	0	3
2116	6	6	0	0	0	0	0	0	0
2117	8	0	0	8	0	4	3	0	1
2118	3	0	1	2	0	1	1	0	0
2119	6	0	0	6	0	2	3	0	1
2120	4	4	0	0	0	0	0	0	0
2121	6	0	0	6	0	3	1	0	2
2122	2	0	0	2	0	1	1	0	0
2123	4	2	1	1	0	0	1	0	0
2124	4	0	0	4	0	2	2	0	0
2125	4	0	1	3	0	2	1	0	0
2126	6	0	0	6	0	2	4	0	0
2127	6	6	0	0	0	0	0	0	0
2128	3	0	1	2	0	2	0	0	0
2129	2	0	0	2	0	0	0	0	2
2130	7	0	0	7	0	2	4	0	1
2131	4	3	0	1	0	0	0	0	1
2132	8	3	2	3	0	1	1	0	1
2133	8	0	1	7	0	2	3	0	2
2134	7	0	0	7	0	3	4	0	0
2135	23	0	22	1	0	4	11	0	6
2136	4	0	0	4	0	2	1	0	1
2137	2	2	0	0	0	0	0	0	0
2138	6	1	1	4	0	1	2	0	1
2139	2	0	0	2	0	0	1	0	1
2140	4	3	1	0	0	0	0	0	0
2141	9	0	0	9	0	1	5	0	3
2142	5	0	1	4	0	2	1	0	1
2143	8	0	0	8	0	3	4	0	1
2144	2	0	0	2	0	0	1	0	1
2145	4	4	0	0	0	0	0	0	0
2146	7	0	1	6	0	2	3	0	1
2147	6	1	0	5	0	2	2	0	1
2148	6	0	0	6	0	3	3	0	0
2149	2	0	0	2	0	1	1	0	0
2150	0	0	0	0	0	0	0	0	0

ID/1	P	S	R	M	F	D	N	G	X
2151	4	0	2	2	0	1	1	0	0
2152	11	10	1	0	0	0	0	0	0
2153	2	2	0	0	0	0	0	0	0
2154	7	0	2	5	0	2	1	0	2
2155	6	0	1	5	0	2	2	0	1
2156	7	0	0	7	0	1	3	0	3
2157	2	0	0	2	0	1	0	0	1
2158	2	0	1	1	0	0	1	0	0
2159	8	0	1	7	0	2	1	0	4
2160	4	0	1	3	0	0	0	0	3
2161	4	0	0	4	0	2	2	0	0
2162	8	0	0	8	0	1	5	0	2
2163	2	0	1	1	0	1	0	0	0
2164	5	0	1	4	0	2	1	0	1
2165	7	0	1	6	0	3	3	2	0
2166	8	0	1	7	0	1	4	0	2
2167	10	0	4	6	0	2	3	0	1
2168	2	0	1	1	0	0	1	0	0
2169	2	2	0	0	0	0	0	0	0
2170	2	0	1	1	0	1	0	0	0
2171	8	2	1	5	0	2	3	0	0
2172	4	0	1	3	0	1	0	0	2
2173	4	0	2	2	0	0	1	0	1
2174	10	0	1	9	0	2	3	0	4
2175	6	0	0	6	0	4	2	0	0
2176	3	0	0	3	0	0	2	0	1
2177	4	1	0	3	0	1	1	0	1
2178	2	0	0	2	0	1	1	0	0
2179	2	1	0	1	0	0	0	0	1
2180	2	0	0	2	0	0	1	0	1
2181	3	0	0	3	0	1	1	0	1
2182	6	2	0	4	0	1	1	0	2
2183	4	1	0	3	0	1	1	0	1
2184	7	4	2	1	0	1	0	0	0
2185	3	1	1	1	0	0	1	0	0
2186	6	0	0	6	0	1	4	0	1
2187	4	0	1	3	0	0	0	0	3
2188	4	0	2	2	0	0	0	0	2
2189	3	0	1	2	0	0	1	0	1
2190	4	0	1	3	0	1	1	0	1
2191	7	2	2	3	0	0	2	0	1
2192	7	1	2	4	0	1	1	0	2
2193	0	0	0	0	0	0	0	0	0
2194	10	0	0	10	0	2	4	0	4
2195	9	0	0	9	0	1	5	0	3
2196	2	2	0	0	0	0	0	0	0
2197	4	2	1	1	0	0	0	0	1
2198	7	0	0	7	0	2	2	0	3
2199	2	0	0	2	0	1	1	0	0
2200	4	0	0	4	0	2	1	0	1

ID/1	P	S	R	M	F	D	N	G	X
2201	8	4	2	2	0	1	0	0	1
2202	0	0	0	0	0	0	0	0	0
2203	4	0	1	3	0	2	1	0	0
2204	6	4	0	2	0	1	0	0	1
2205	4	0	2	2	0	1	0	0	1
2206	6	0	0	6	0	1	4	0	1
2207	6	5	1	0	0	0	0	0	0
2208	6	5	0	1	0	1	0	0	0
2209	5	2	0	3	0	1	1	0	1
2210	3	0	1	2	0	1	0	0	1
2211	7	0	2	5	0	3	1	0	1
2212	2	0	0	2	0	1	0	0	1
2213	7	0	0	7	0	3	4	0	0
2214	8	6	2	0	0	0	0	0	0
2215	3	1	0	2	0	0	2	0	0
2216	7	0	4	3	0	1	1	0	1
2217	2	2	0	0	0	0	0	0	0
2218	11	9	1	1	0	1	0	0	0
2219	2	2	0	0	0	0	0	0	0
2220	4	0	0	4	0	2	1	0	1
2221	8	0	0	8	0	2	5	0	1
2222	2	2	0	0	0	0	0	0	0
2223	4	4	0	0	0	0	0	0	0
2224	8	0	2	6	0	0	2	0	4
2225	8	0	3	5	0	0	2	1	2
2226	5	0	0	5	0	2	3	0	0
2227	5	0	0	5	0	1	2	0	2
2228	6	0	3	3	0	0	2	0	1
2229	4	0	0	4	0	0	1	0	3
2230	2	0	0	2	0	1	1	0	0
2231	6	0	0	6	0	2	1	0	3
2232	2	0	1	1	0	0	1	0	0
2233	0	0	0	0	0	0	0	0	0
2234	3	0	0	3	0	1	2	0	0
2235	8	4	3	1	0	0	1	0	0
2236	6	0	0	6	0	2	2	0	2
2237	5	4	1	0	0	0	0	0	0
2238	6	3	2	1	0	0	1	0	0
2239	9	8	0	1	0	0	1	0	0
2240	8	2	4	2	0	2	0	0	0
2241	4	1	1	2	0	1	1	0	0
2242	0	0	0	0	0	0	0	0	0
2243	7	0	0	7	0	2	4	0	1
2244	4	0	2	2	0	1	1	0	0
2245	4	4	0	0	0	0	0	0	0
2246	8	3	3	2	0	1	1	0	0
2247	6	0	0	6	0	3	2	0	1
2248	10	2	0	8	0	4	3	4	1
2249	5	2	3	0	0	0	0	0	0
2250	4	0	0	4	0	2	2	0	0

IMPS Statistics Catalog

ID/1	P	S R M F D N G X	ID/1	P	S R M F D N G X	ID/1	P	S R M F D N G X
2251	4	4 0 0 0 0 0 0 0	2301	4	0 2 2 0 0 1 0 1	2351	11	0 2 9 0 1 3 0 5
2252	2	0 0 2 0 1 0 0 1	2302	6	0 1 5 0 2 3 0 0	2352	0	0 0 0 0 0 0 0 0
2253	4	0 0 4 0 1 1 0 2	2303	2	0 1 1 0 0 1 0 0	2353	7	0 0 7 0 2 1 0 4
2254	4	0 0 4 0 2 2 0 0	2304	11	2 0 9 0 4 3 0 2	2354	6	0 2 4 0 2 2 0 0
2255	3	2 1 0 0 0 0 0 0	2305	5	0 0 5 0 2 3 0 0	2355	7	2 1 4 0 1 2 0 1
2256	2	0 0 2 0 0 0 0 2	2306	8	2 2 4 0 3 1 0 0	2356	7	5 2 0 0 0 0 0 0
2257	2	0 1 1 0 0 1 0 0	2307	5	5 0 0 0 0 0 0 0	2357	4	2 0 2 0 1 1 0 0
2258	4	3 1 0 0 0 0 0 0	2308	10	8 1 1 0 1 0 0 0	2358	2	0 0 2 0 0 0 0 2
2259	3	1 0 2 0 0 1 0 1	2309	2	1 0 1 0 1 0 0 0	2359	11	0 2 9 0 3 3 0 3
2260	7	5 2 0 0 0 0 0 0	2310	11	3 2 6 0 2 3 0 1	2360	9	0 0 9 0 1 4 0 4
2261	3	0 0 3 0 0 2 0 1	2311	6	4 0 2 0 1 0 0 1	2361	6	0 0 6 0 1 1 0 4
2262	2	0 0 2 0 0 1 0 1	2312	4	3 1 0 0 0 0 0 0	2362	3	0 0 3 0 1 2 0 0
2263	7	7 0 0 0 0 0 0 0	2313	5	2 2 1 0 1 0 0 0	2363	4	4 0 0 0 0 0 0 0
2264	5	5 0 0 0 0 0 0 0	2314	6	0 0 6 0 2 1 0 3	2364	6	1 1 4 0 0 3 0 1
2265	0	0 0 0 0 0 0 0 0	2315	2	2 0 0 0 0 0 0 0	2365	5	0 0 5 0 2 2 0 1
2266	4	3 1 0 0 0 0 0 0	2316	5	0 0 5 0 2 2 0 1	2366	6	0 0 6 0 0 2 0 4
2267	10	0 1 9 0 2 5 0 2	2317	14	0 113 0 3 6 0 4	2367	9	0 1 8 0 2 5 0 1
2268	3	0 0 3 0 1 1 0 1	2318	20	0 119 0 5 6 3 6	2368	6	0 0 6 0 2 2 0 2
2269	8	3 2 3 0 0 1 0 2	2319	4	0 0 4 0 2 1 0 1	2369	2	0 0 2 0 1 1 0 0
2270	4	0 0 4 0 1 2 0 1	2320	11	7 4 0 0 0 0 0 0	2370	8	3 2 3 0 0 3 0 0
2271	5	3 1 1 0 0 0 0 1	2321	3	2 1 0 0 0 0 0 0	2371	2	0 0 2 0 0 1 0 1
2272	3	0 0 3 0 1 2 0 0	2322	6	2 2 2 0 0 2 0 0	2372	3	2 1 0 0 0 0 0 0
2273	10	0 1 9 0 3 5 0 1	2323	0	0 0 0 0 0 0 0 0	2373	6	0 1 5 0 0 1 0 4
2274	6	0 0 6 0 3 1 0 2	2324	6	0 1 5 0 2 2 0 1	2374	4	0 1 3 0 1 2 0 0
2275	6	0 2 4 0 1 0 0 3	2325	9	0 1 8 0 4 1 0 3	2375	0	0 0 0 0 0 0 0 0
2276	6	0 3 3 0 0 1 0 2	2326	15	15 0 0 0 0 0 0 0	2376	6	5 1 0 0 0 0 0 0
2277	6	0 1 5 0 3 2 0 0	2327	6	0 1 5 0 3 2 0 0	2377	4	0 0 4 0 2 2 0 0
2278	6	0 0 6 0 2 4 0 0	2328	10	1 2 7 0 2 3 0 2	2378	1	1 0 0 0 0 0 0 0
2279	6	3 1 2 0 0 2 0 0	2329	4	0 0 4 0 0 1 0 3	2379	11	4 2 5 0 3 2 0 0
2280	8	0 0 8 0 3 2 0 3	2330	4	3 0 1 0 0 0 0 1	2380	3	0 0 3 0 1 2 0 0
2281	7	0 0 7 0 3 3 0 1	2331	8	0 2 6 0 2 3 0 1	2381	8	2 0 6 0 2 3 0 1
2282	0	0 0 0 0 0 0 0 0	2332	5	3 1 1 0 0 1 0 0	2382	2	0 1 1 0 0 0 0 1
2283	5	0 0 5 0 1 2 0 2	2333	6	3 0 3 0 0 2 0 1	2383	2	0 0 2 0 1 1 0 0
2284	5	0 2 3 0 0 3 0 0	2334	9	0 0 9 0 2 3 0 4	2384	6	0 0 6 0 1 1 0 4
2285	0	0 0 0 0 0 0 0 0	2335	5	0 1 4 0 0 3 0 1	2385	2	0 0 2 0 1 0 0 1
2286	11	0 110 0 5 3 0 2	2336	4	0 0 4 0 2 2 0 0	2386	7	2 0 5 0 2 2 0 1
2287	6	0 0 6 0 2 1 0 3	2337	11	0 011 0 4 6 0 1	2387	5	0 0 5 0 1 2 0 2
2288	5	0 2 3 0 1 1 0 1	2338	2	0 0 2 0 1 1 0 0	2388	2	0 0 2 0 0 1 0 1
2289	2	0 0 2 0 0 1 0 1	2339	6	0 0 6 0 3 3 0 0	2389	4	0 0 4 0 1 1 0 2
2290	9	0 0 9 0 3 2 0 4	2340	0	0 0 0 0 0 0 0 0	2390	5	1 1 3 0 0 2 0 1
2291	4	4 0 0 0 0 0 0 0	2341	0	0 0 0 0 0 0 0 0	2391	0	0 0 0 0 0 0 0 0
2292	4	0 0 4 0 2 1 0 1	2342	8	0 1 7 0 2 1 0 4	2392	4	0 1 3 0 1 2 0 0
2293	7	0 0 7 0 3 4 0 0	2343	9	0 1 8 0 2 5 0 1	2393	8	7 0 1 0 1 0 0 0
2294	5	0 1 4 0 1 0 0 3	2344	8	0 2 6 0 3 3 5 0	2394	7	1 1 5 0 1 3 1 1
2295	2	1 0 1 0 1 0 0 0	2345	6	2 1 3 0 0 2 0 1	2395	6	0 1 5 0 1 3 0 1
2296	11	0 011 0 4 6 0 1	2346	11	0 2 9 0 1 3 0 5	2396	6	0 0 6 0 1 2 0 3
2297	9	7 2 0 0 0 0 0 0	2347	11	0 110 0 5 5 0 0	2397	7	0 0 7 0 2 2 0 3
2298	2	0 0 2 0 1 0 0 1	2348	0	0 0 0 0 0 0 0 0	2398	0	0 0 0 0 0 0 0 0
2299	2	0 0 2 0 1 1 0 0	2349	8	2 3 3 0 1 0 0 2	2399	4	0 0 4 0 1 2 0 1
2300	2	0 1 1 0 1 0 0 0	2350	5	0 0 5 0 2 2 0 1	2400	10	0 1 9 0 3 4 0 2

IMPS Statistics Catalog

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2404	7	0	1	6	0	1	3	0	2
2405	5	3	0	2	0	1	1	0	0
2406	3	0	0	3	0	1	2	0	0
2407	4	0	1	3	0	0	1	0	2
2408	4	3	0	1	0	0	1	0	0
2409	2	0	0	2	0	0	1	0	1
2410	2	0	0	2	0	0	0	0	2
2411	0	0	0	0	0	0	0	0	0
2412	2	0	0	2	0	1	1	0	0
2413	5	1	2	2	0	1	0	0	1
2414	8	6	2	0	0	0	0	0	0
2415	2	0	0	2	0	1	1	0	0
2416	8	0	4	4	0	1	2	0	1
2417	5	0	3	2	0	1	0	0	1
2418	4	0	0	4	0	2	1	0	1
2419	4	0	0	4	0	2	2	0	0
2420	0	0	0	0	0	0	0	0	0
2421	11	6	3	2	0	0	2	0	0
2422	6	0	1	5	0	3	0	0	2
2423	6	0	0	6	0	1	1	0	4
2424	8	0	0	8	0	1	4	0	3
2425	2	0	0	2	0	0	0	0	2
2426	2	2	0	0	0	0	0	0	0
2427	8	0	0	8	0	3	4	0	1
2428	7	5	2	0	0	0	0	0	0
2429	5	0	0	5	0	1	2	0	2
2430	6	0	2	4	0	1	0	0	3
2431	2	0	0	2	0	0	1	0	1
2432	2	0	1	1	0	1	0	0	0
2433	2	0	1	1	0	1	0	0	0
2434	2	0	1	1	0	0	1	0	0
2435	7	0	0	7	0	3	2	0	2
2436	6	0	0	6	0	3	3	0	0
2437	6	0	1	5	0	2	2	0	1
2438	0	0	0	0	0	0	0	0	0
2439	6	5	1	0	0	0	0	0	0
2440	6	0	0	6	0	3	1	0	2
2441	4	2	1	1	0	0	0	0	1
2442	13	0	1	12	0	6	3	0	3
2443	3	2	1	0	0	0	0	0	0
2444	0	0	0	0	0	0	0	0	0
2445	11	0	0	11	0	5	5	0	1
2446	2	0	0	2	0	1	1	0	0
2447	4	0	0	4	0	2	1	0	1
2448	5	5	0	0	0	0	0	0	0
2449	4	0	0	4	0	2	2	0	0
2450	7	1	0	6	0	3	2	0	1
2451	6	0	0	6	0	2	2	0	2
2452	7	0	0	7	0	2	3	0	2
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2454	5	0	0	5	0	2	2	0	1
2455	4	0	2	2	0	1	1	0	0
2456	7	6	0	1	0	1	0	0	0
2457	6	0	0	6	0	2	3	0	1
2458	8	3	1	4	0	1	3	0	0
2459	12	5	4	3	0	1	2	0	0
2460	6	0	1	5	0	2	2	0	1
2461	6	4	0	2	0	1	0	0	1
2462	2	0	0	2	0	1	1	0	0
2463	3	1	2	0	0	0	0	0	0
2464	2	1	0	1	0	0	0	0	1
2465	6	2	4	0	0	0	0	0	0
2466	4	1	0	3	0	1	2	0	0
2467	2	0	0	2	0	1	1	0	0
2468	4	0	1	3	0	0	0	0	3
2469	2	0	0	2	0	0	1	0	1
2470	4	0	0	4	0	2	2	0	0
2471	4	0	0	4	0	1	2	0	1
2472	5	0	0	5	0	2	2	0	1
2473	9	0	0	9	0	4	4	0	1
2474	9	7	2	0	0	0	0	0	0
2475	3	0	1	2	0	1	1	0	0
2476	8	5	1	2	0	1	1	0	0
2477	5	0	0	5	0	2	2	0	1
2478	0	0	0	0	0	0	0	0	0
2479	9	0	0	9	0	3	0	0	6
2480	3	0	0	3	0	1	1	0	1
2481	4	0	0	4	0	1	1	0	2
2482	4	0	0	4	0	2	1	0	1
2483	7	1	1	5	0	1	3	0	1
2484	8	0	0	8	0	2	3	0	3
2485	4	0	1	3	0	0	2	0	1
2486	7	0	0	7	0	0	3	0	4
2487	4	0	1	3	0	2	1	0	0
2488	3	0	0	3	0	0	2	0	1
2489	7	0	0	7	0	3	4	0	0
2490	3	1	0	2	0	1	1	0	0
2491	9	0	0	9	0	3	5	0	1
2492	5	4	1	0	0	0	0	0	0
2493	1	0	0	1	0	1	0	0	0
2494	2	2	0	0	0	0	0	0	0
2495	2	0	0	2	0	0	1	0	1
2496	0	0	0	0	0	0	0	0	0
2497	4	0	0	4	0	2	1	0	1
2498	2	0	0	2	0	1	1	0	0
2499	6	0	0	6	0	2	3	0	1
2500	10	0	1	9	0	4	5	0	0
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2502	7	4	1	2	0	1	0	0	1
2503	4	0	0	4	0	2	1	0	1
2504	2	0	0	2	0	0	0	0	2
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2507	7	0	0	7	0	2	3	0	2
2508	0	0	0	0	0	0	0	0	0
2509	7	0	0	7	0	3	4	0	0
2510	2	0	0	2	0	1	1	0	0
2511	7	0	0	7	0	2	2	0	3
2512	8	1	0	7	0	3	1	0	3
2513	4	1	0	3	0	1	1	0	1
2514	4	0	0	4	0	2	2	0	0
2515	4	0	0	4	0	2	1	0	1
2516	7	0	0	7	0	2	3	0	2
2517	4	0	1	3	0	1	0	0	2
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2519	4	0	0	4	0	2	1	0	1
2520	2	0	2	0	0	0	0	0	0
2521	9	0	1	8	0	4	3	0	1
2522	8	2	1	5	0	2	2	0	1
2523	4	1	1	2	0	1	0	0	1
2524	12	5	4	3	0	1	2	0	0
2525	5	0	1	4	0	0	3	0	1
2526	2	0	0	2	0	0	1	0	1
2527	4	0	0	4	0	1	2	0	1
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2530	13	0	0	13	0	2	7	0	4
2531	4	2	1	1	0	0	1	0	0
2532	7	0	0	7	0	3	2	0	2
2533	6	0	1	5	0	0	3	0	2
2534	5	2	1	2	0	2	0	0	0
2535	7	0	0	7	0	0	3	0	4
2536	4	0	0	4	0	2	2	0	0
2537	6	0	0	6	0	2	3	0	1
2538	9	0	2	7	0	2	4	0	1
2539	6	0	1	5	0	2	3	0	0
2540	7	0	0	7	0	2	2	0	3
2541	4	0	0	4	0	1	1	0	2
2542	5	2	0	3	0	1	1	0	1
2543	6	0	0	6	0	2	3	0	1
2544	12	5	2	5	0	1	3	0	1
2545	6	0	0	6	0	1	1	0	4
2546	4	1	1	2	0	0	2	0	0
2547	2	0	0	2	0	0	0	0	2
2548	4	0	0	4	0	2	2	0	0
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2550	2	0	0	2	0	1	1	0	0

IMPS Statistics Catalog

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2554	2	0	0	2	0	1	0	0	1
2555	6	0	0	6	0	3	3	0	0
2556	2	0	0	2	0	2	0	0	0
2557	3	0	0	3	0	0	0	0	3
2558	7	0	1	6	0	2	3	0	1
2559	2	1	0	1	0	0	0	0	1
2560	10	0	3	7	0	1	3	0	3
2561	15	0	2	13	0	2	5	0	6
2562	4	1	0	3	0	2	0	0	1
2563	7	3	0	4	0	0	2	0	2
2564	9	0	1	8	0	4	3	8	0
2565	4	0	0	4	0	2	2	0	0
2566	7	0	0	7	0	2	2	0	3
2567	10	0	2	8	0	4	1	0	3
2568	5	0	0	5	0	0	1	0	4
2569	5	5	0	0	0	0	0	0	0
2570	5	3	0	2	0	2	0	0	0
2571	4	0	0	4	0	1	1	0	2
2572	4	0	0	4	0	1	1	0	2
2573	3	0	0	3	0	1	1	0	1
2574	3	0	1	2	0	0	1	0	1
2575	6	0	1	5	0	0	1	2	2
2576	0	0	0	0	0	0	0	0	0
2577	12	0	0	12	0	4	4	0	4
2578	4	0	0	4	0	2	1	0	1
2579	9	0	0	9	0	3	5	0	1
2580	9	0	0	9	0	4	2	0	3
2581	7	0	0	7	0	2	3	0	2
2582	7	3	2	2	0	0	1	0	1
2583	5	0	0	5	0	1	2	0	2
2584	11	0	3	8	0	3	3	0	2
2585	7	0	0	7	0	2	2	0	3
2586	3	0	0	3	0	1	2	0	0
2587	6	0	1	5	0	3	2	0	0
2588	6	0	1	5	0	0	3	0	2
2589	10	0	0	10	0	2	5	0	3
2590	5	0	0	5	0	0	3	0	2
2591	6	0	0	6	0	2	2	0	2
2592	4	0	1	3	0	1	2	0	0
2593	6	0	0	6	0	2	4	0	0
2594	4	0	0	4	0	2	2	0	0
2595	7	1	0	6	0	0	3	0	3
2596	4	0	0	4	0	2	1	0	1
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2598	6	0	0	6	0	2	1	0	3
2599	7	0	0	7	0	3	1	0	3
2600	4	0	1	3	0	1	2	0	0

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2603	13	0	0	13	0	4	3	0	6
2604	9	1	1	7	0	2	4	0	1
2605	4	0	0	4	0	1	1	0	2
2606	5	0	0	5	0	3	2	0	0
2607	4	0	0	4	0	2	2	0	0
2608	5	0	0	5	0	1	2	0	2
2609	2	0	0	2	0	0	0	0	2
2610	4	0	0	4	0	1	0	0	3
2611	6	0	1	5	0	1	2	0	2
2612	0	0	0	0	0	0	0	0	0
2613	6	3	0	3	0	1	1	0	1
2614	7	0	0	7	0	2	2	0	3
2615	4	0	2	2	0	2	0	0	0
2616	7	0	2	5	0	1	2	0	2
2617	4	3	1	0	0	0	0	0	0
2618	6	0	0	6	0	2	3	0	1
2619	4	0	0	4	0	1	0	0	3
2620	7	0	0	7	0	2	3	0	2
2621	9	7	2	0	0	0	0	0	0
2622	8	0	0	8	0	1	1	0	6
2623	6	0	1	5	0	3	2	0	0
2624	4	0	0	4	0	0	2	0	2
2625	5	0	0	5	0	2	2	0	1
2626	7	0	2	5	0	1	1	0	3
2627	6	0	0	6	0	3	2	0	1
2628	9	0	0	9	0	4	3	0	2
2629	3	0	0	3	0	0	2	0	1
2630	4	0	0	4	0	2	2	0	0
2631	6	0	0	6	0	1	1	0	4
2632	4	4	0	0	0	0	0	0	0
2633	7	0	1	6	0	2	3	0	1
2634	5	2	0	3	0	0	2	0	1
2635	2	0	0	2	0	1	0	0	1
2636	8	0	1	7	0	2	1	3	2
2637	14	0	3	11	0	2	4	2	5
2638	9	0	3	6	0	3	2	4	0
2639	4	0	0	4	0	2	1	0	1
2640	4	0	0	4	0	1	2	0	1
2641	4	0	1	3	0	1	0	0	2
2642	11	0	0	11	0	5	2	0	4
2643	13	0	0	13	0	4	4	0	5
2644	2	0	0	2	0	0	0	0	2
2645	8	3	1	4	0	1	1	0	2
2646	11	2	1	8	0	2	5	0	1
2647	7	0	0	7	0	3	1	0	3
2648	8	0	0	8	0	1	3	0	4
2649	13	0	1	12	0	2	4	0	6
2650	7	0	0	7	0	3	1	0	3

ID/1	P	S	R	M	F	D	N	G	X
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2653	6	0	1	5	0	0	1	0	4
2654	8	4	0	4	0	1	1	0	2
2655	6	0	1	5	0	0	0	0	5
2656	4	0	0	4	0	1	2	0	1
2657	8	0	1	7	0	1	2	0	4
2658	4	0	1	3	0	0	1	0	2
2659	6	2	0	4	0	1	1	0	2
2660	11	3	0	8	0	3	4	0	1
2661	14	0	0	14	0	4	4	0	6
2662	9	0	4	5	0	2	2	0	1
2663	8	0	0	8	0	2	4	0	2
2664	5	1	0	4	0	1	0	0	3
2665	4	0	0	4	0	2	2	0	0
2666	12	0	2	10	0	3	4	0	3
2667	7	3	0	4	0	1	0	0	3
2668	5	0	0	5	0	2	3	0	0
2669	5	0	0	5	0	2	2	0	1
2670	4	0	1	3	0	0	2	0	1
2671	7	0	0	7	0	3	4	0	0
2672	6	4	0	2	0	0	0	0	2
2673	2	0	0	2	0	1	0	0	1
2674	6	6	0	0	0	0	0	0	0
2675	2	0	0	2	0	0	0	0	2
2676	2	0	0	2	0	1	1	0	0
2677	6	2	1	3	0	0	1	0	2
2678	9	0	0	9	0	3	2	0	4
2679	5	0	0	5	0	2	1	0	2
2680	10	0	0	10	0	3	4	0	3
2681	7	0	0	7	0	3	2	0	2
2682	4	0	0	4	0	1	1	0	2
2683	6	0	1	5	0	0	0	0	5
2684	8	0	1	7	0	2	0	0	5
2685	2	0	0	2	0	0	1	0	1
2686	4	0	0	4	0	2	2	0	0
2687	9	3	2	4	0	1	3	0	0
2688	6	0	2	4	0	1	2	0	1
2689	5	0	0	5	0	1	2	0	2
2690	6	3	3	0	0	0	0	0	0
2691	4	0	0	4	0	1	1	0	2
2692	4	0	1	3	0	2	1	0	0
2693	7	0	1	6	0	1	4	2	0
2694	6	0	0	6	0	1	3	0	2
2695	4	2	1	1	0	1	0	0	0
2696	2	1	1	0	0	0	0	0	0
2697	6	6	0	0	0	0	0	0	0
2698	6	0	1	5	0	1	2	0	2
2699	9	0	1	8	0	2	4	0	2
2700	5	0	0	5	0	0	2	0	3

IMPS Statistics Catalog

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2703	2	0	0	2	0	1	1	0	0
2704	2	0	0	2	0	1	1	0	0
2705	9	0	0	9	0	1	6	0	2
2706	6	0	0	6	0	1	3	0	2
2707	6	4	2	0	0	0	0	0	0
2708	4	0	0	4	0	0	1	0	3
2709	4	0	0	4	0	2	1	0	1
2710	0	0	0	0	0	0	0	0	0
2711	7	0	2	5	0	0	2	0	3
2712	7	0	0	7	0	2	1	0	4
2713	6	0	0	6	0	1	2	0	3
2714	2	0	0	2	0	0	1	0	1
2715	6	2	1	3	0	1	0	0	2
2716	2	0	0	2	0	1	0	0	1
2717	2	0	0	2	0	1	1	0	0
2718	8	5	1	2	0	0	1	0	1
2719	8	0	1	7	0	1	5	0	1
2720	2	0	1	1	0	1	0	0	0
2721	7	0	2	5	0	1	2	0	2
2722	0	0	0	0	0	0	0	0	0
2723	6	0	0	6	0	3	2	0	1
2724	4	2	0	2	0	0	1	0	1
2725	12	12	0	0	0	0	0	0	0
2726	6	0	0	6	0	1	3	0	2
2727	5	0	0	5	0	3	2	0	0
2728	12	4	2	6	0	2	4	0	0
2729	9	2	1	6	0	3	3	0	0
2730	4	0	0	4	0	1	1	0	2
2731	4	4	0	0	0	0	0	0	0
2732	4	0	0	4	0	2	2	0	0
2733	7	0	0	7	0	3	4	0	0
2734	6	2	0	4	0	1	1	0	2
2735	0	0	0	0	0	0	0	0	0
2736	6	0	0	6	0	3	2	0	1
2737	6	0	1	5	0	2	1	0	2
2738	2	0	0	2	0	1	0	0	1
2739	2	1	0	1	0	0	0	0	1
2740	9	1	2	6	0	2	2	0	2
2741	5	0	0	5	0	2	2	0	1
2742	6	0	1	5	0	2	2	0	1
2743	2	0	0	2	0	0	1	0	1
2744	0	0	0	0	0	0	0	0	0
2745	7	0	0	7	0	2	5	0	0
2746	3	0	0	3	0	1	1	0	1
2747	2	1	0	1	0	0	0	0	1
2748	2	0	0	2	0	1	0	0	1
2749	3	0	0	3	0	1	2	0	0
2750	2	0	0	2	0	0	1	0	1
2751	9	0	1	8	0	2	4	0	2
2752	2	0	0	2	0	1	1	0	0
2753	2	2	0	0	0	0	0	0	0
2754	2	0	0	2	0	1	0	0	1
2755	2	0	0	2	0	0	1	0	1
2756	2	0	0	2	0	0	0	0	2
2757	2	2	0	0	0	0	0	0	0
2758	0	0	0	0	0	0	0	0	0
2759	6	1	2	3	0	2	0	0	1
2760	5	5	0	0	0	0	0	0	0
2761	6	0	3	3	0	2	0	0	1
2762	5	0	0	5	0	1	2	0	2
2763	1	0	0	1	0	1	0	0	0
2764	1	0	0	1	0	0	0	0	1
2765	6	0	0	6	0	1	2	0	3
2766	6	0	0	6	0	2	2	0	2
2767	2	0	0	2	0	0	0	0	2
2768	0	0	0	0	0	0	0	0	0
2769	6	0	2	4	0	1	2	0	1
2770	6	0	0	6	0	2	1	0	3
2771	2	0	0	2	0	0	1	0	1
2772	0	0	0	0	0	0	0	0	0
2773	0	0	0	0	0	0	0	0	0
2774	4	4	0	0	0	0	0	0	0
2775	3	0	1	2	0	0	2	0	0
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2779	2	0	0	2	0	0	1	0	1
2780	2	0	0	2	0	1	1	0	0
2781	2	0	0	2	0	0	0	0	2
2782	2	0	0	2	0	0	1	0	1
2783	2	0	0	2	0	1	1	0	0
2784	2	0	0	2	0	1	1	0	0
2785	5	0	0	5	0	2	2	0	1
2786	2	0	0	2	0	1	0	0	1
2787	6	0	1	5	0	1	3	0	1
2788	6	0	0	6	0	2	4	0	0
2789	2	0	0	2	0	1	1	0	0
2790	2	0	0	2	0	1	1	0	0
2791	8	0	2	6	0	1	4	0	1
2792	0	0	0	0	0	0	0	0	0
2793	4	2	2	0	0	0	0	0	0
2794	0	0	0	0	0	0	0	0	0
2795	0	0	0	0	0	0	0	0	0
2796	3	0	0	3	0	1	1	0	1
2797	7	6	0	1	0	0	C	0	1
2798	2	0	0	2	0	1	0	0	1
2799	2	0	0	2	0	0	1	0	1
2800	6	0	0	6	0	2	2	0	2
2801	2	0	0	2	0	1	0	0	1
2802	4	0	1	3	0	0	2	0	1
2803	7	0	1	6	0	2	2	5	0
2804	8	1	2	5	0	1	3	0	1
2805	4	0	0	4	0	1	1	0	2
2806	7	0	1	6	0	1	3	0	2
2807	4	0	0	4	0	1	3	0	0
2808	9	0	1	8	0	2	3	0	3
2809	2	0	0	2	0	1	0	0	1
2810	2	0	0	2	0	1	1	0	0
2811	3	0	0	3	0	1	1	0	1
2812	2	0	0	2	0	0	1	0	1
2813	3	3	0	0	0	0	0	0	0
2814	6	0	1	5	0	3	0	0	2
2815	0	0	0	0	0	0	0	0	0
2816	2	1	1	0	0	0	0	0	0
2817	1	0	0	1	0	0	0	0	1
2818	2	0	0	2	0	1	0	0	1
2819	9	1	1	7	0	0	2	0	5
2820	0	0	0	0	0	0	0	0	0
2821	0	0	0	0	0	0	0	0	0
2822	0	0	0	0	0	0	0	0	0
2823	2	0	0	2	0	1	0	0	1
2824	0	0	0	0	0	0	0	0	0
2825	6	0	0	6	0	1	1	0	4
2826	10	8	2	0	0	0	0	0	0
2827	3	0	0	3	0	1	1	0	1
2828	9	0	0	9	0	4	4	9	0
2829	7	3	1	3	0	0	2	0	1
2830	5	0	0	5	0	2	2	0	1
2831	6	0	0	6	0	2	3	0	1
2832	7	0	0	7	0	1	2	0	4
2833	4	0	0	4	0	2	2	0	0
2834	8	0	0	8	0	4	1	0	3
2835	3	1	0	2	0	0	0	0	2
2836	2	0	0	2	0	1	1	0	0
2837	4	0	0	4	0	2	2	0	0
2838	6	0	0	6	0	4	1	0	1
2839	12	0	1	11	0	3	3	0	5
2840	0	0	0	0	0	0	0	0	0
2841	3	0	0	3	0	1	1	0	1
2842	15	0	3	12	0	4	7	0	1
2843	7	2	0	5	0	1	2	0	2
2844	3	0	0	3	0	1	1	0	1
2845	4	0	0	4	0	1	0	0	3
2846	8	3	3	2	0	1	1	0	0
2847	1	0	0	1	0	0	1	0	0
2848	5	0	2	3	0	0	2	0	1
2849	7	1	0	6	0	3	2	0	1
2850	2	0	0	2	0	1	0	0	1

IMPS Statistics Catalog

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2851	4	0	0	4	0	2	1	0	1
2852	4	0	1	3	0	2	0	0	1
2853	8	0	1	7	0	3	3	0	1
2854	7	0	0	7	0	1	3	0	3
2855	4	0	1	3	0	0	2	0	1
2856	9	4	1	4	0	1	2	0	1
2857	4	0	0	4	0	0	2	0	2
2858	6	0	0	6	0	2	3	0	1
2859	5	0	0	5	0	2	2	0	1
2860	6	0	1	5	0	2	2	0	1
2861	4	0	0	4	0	2	1	0	1
2862	7	0	1	6	0	1	2	0	3
2863	6	0	0	6	0	2	3	0	1
2864	8	4	2	2	0	0	1	0	1
2865	2	2	0	0	0	0	0	0	0
2866	4	0	0	4	0	1	2	0	1
2867	7	0	3	4	0	1	3	0	0
2868	6	0	1	5	0	2	3	0	0
2869	4	0	0	4	0	1	2	0	1
2870	4	0	1	3	0	0	1	0	2
2871	6	0	0	6	0	2	1	0	3
2872	6	2	0	4	0	1	1	0	2
2873	6	0	2	4	0	1	2	0	1
2874	0	0	0	0	0	0	0	0	0
2875	6	0	0	6	0	1	3	0	2
2876	4	0	0	4	0	2	2	0	0
2877	4	0	0	4	0	0	1	0	3
2878	5	0	0	5	0	1	2	0	2
2879	7	7	0	0	0	0	0	0	0
2880	6	0	1	5	0	2	2	0	1
2881	4	0	2	2	0	1	1	0	0
2882	1	0	0	1	0	0	0	0	1
2883	5	0	1	4	0	1	0	0	3
2884	8	0	1	7	0	2	2	0	3
2885	2	0	0	2	0	1	0	0	1
2886	6	0	0	6	0	1	2	0	3
2887	2	0	0	2	0	1	1	0	0
2888	0	0	0	0	0	0	0	0	0
2889	6	0	0	6	0	0	1	0	5
2890	6	0	0	6	0	2	4	0	0
2891	2	0	0	2	0	1	1	0	0
2892	5	4	1	0	0	0	0	0	0
2893	4	3	0	1	0	0	1	0	0
2894	4	0	0	4	0	1	1	0	2
2895	4	0	2	2	0	0	0	0	2
2896	2	0	0	2	0	0	0	0	2
2897	8	0	1	7	0	3	2	0	2
2898	5	0	2	3	0	0	2	0	1
2899	6	0	0	6	0	1	2	0	3
2900	4	0	0	4	0	2	1	0	1
2901	4	0	0	4	0	2	2	0	0
2902	5	0	0	5	0	1	2	0	2
2903	0	0	0	0	0	0	0	0	0
2904	7	2	1	4	0	1	3	0	0
2905	6	0	0	6	0	1	3	0	2
2906	5	5	0	0	0	0	0	0	0
2907	5	0	1	4	0	0	2	0	2
2908	7	4	1	2	0	1	1	0	0
2909	8	1	0	7	0	2	3	0	2
2910	9	0	0	9	0	4	5	0	0
2911	2	0	0	2	0	1	0	0	1
2912	2	0	0	2	0	0	0	0	2
2913	12	0	0	12	0	5	4	0	3
2914	0	0	0	0	0	0	0	0	0
2915	6	0	0	6	0	1	3	0	2
2916	0	0	0	0	0	0	0	0	0
2917	4	0	0	4	0	2	1	0	1
2918	4	0	0	4	0	2	2	0	0
2919	4	0	0	4	0	1	2	0	1
2920	7	6	1	0	0	0	0	0	0
2921	7	0	0	7	0	3	3	0	1
2922	4	0	1	3	0	0	1	0	2
2923	7	0	0	7	0	2	2	0	3
2924	9	0	0	9	0	4	4	0	1
2925	7	0	0	7	0	1	4	0	2
2926	5	0	0	5	0	1	2	0	2
2927	6	0	0	6	0	1	2	0	3
2928	4	0	1	3	0	1	2	0	0
2929	13	0	1	12	0	5	4	0	3
2930	4	0	1	3	0	0	2	0	1
2931	4	0	0	4	0	0	1	0	3
2932	4	0	0	4	0	2	2	0	0
2933	9	3	4	2	0	1	1	0	0
2934	10	6	2	2	0	0	1	0	1
2935	4	0	1	3	0	1	0	0	2
2936	9	0	1	8	0	2	3	0	3
2937	6	0	0	6	0	1	3	0	2
2938	7	0	0	7	0	2	2	0	3
2939	7	0	0	7	0	2	3	0	2
2940	5	0	0	5	0	3	1	0	1
2941	7	0	0	7	0	2	3	0	2
2942	11	0	1	10	0	4	2	0	4
2943	8	0	1	7	0	3	2	0	2
2944	2	0	0	2	0	0	1	0	1
2945	5	2	0	3	0	1	2	0	0
2946	4	0	0	4	0	1	1	0	2
2947	4	0	0	4	0	2	2	0	0
2948	2	0	0	2	0	0	0	0	2
2949	10	0	2	8	0	3	3	0	2
2950	7	2	0	5	0	2	2	0	1
2951	6	6	0	0	0	0	0	0	0
2952	2	1	0	1	0	0	0	0	1
2953	11	0	0	11	0	3	5	0	3
2954	5	0	0	5	0	1	3	0	1
2955	5	0	0	5	0	2	2	0	1
2956	4	0	1	3	0	1	1	0	1
2957	8	2	1	5	0	0	1	0	4
2958	4	0	0	4	0	2	1	0	1
2959	4	3	0	1	0	0	0	0	1
2960	0	0	0	0	0	0	0	0	0
2961	2	0	0	2	0	0	0	0	2
2962	7	0	4	3	0	2	1	0	0
2963	8	0	1	7	0	2	2	0	3
2964	8	0	2	6	0	2	3	0	1
2965	13	1	2	10	0	4	3	0	3
2966	3	0	0	3	0	1	2	0	0
2967	6	4	2	0	0	0	0	0	0
2968	2	0	0	2	0	1	1	0	0
2969	5	0	0	5	0	2	2	0	1
2970	2	0	1	1	0	0	0	0	1
2971	4	0	0	4	0	2	2	0	0
2972	9	0	0	9	0	3	4	0	2
2973	9	0	1	8	0	3	3	0	2
2974	6	0	0	6	0	2	1	0	3
2975	0	0	0	0	0	0	0	0	0
2976	4	3	0	1	0	0	1	0	0
2977	7	0	0	7	0	4	2	0	1
2978	6	0	2	4	0	1	2	0	1
2979	7	1	2	4	0	1	0	0	3
2980	4	0	0	4	0	1	2	0	1
2981	4	0	0	4	0	1	2	0	1
2982	6	0	0	6	0	1	2	0	3
2983	8	6	1	1	0	0	1	0	0
2984	11	0	0	11	0	3	5	0	3
2985	8	0	0	8	0	2	3	0	3
2986	9	5	2	2	0	0	0	0	2
2987	8	2	0	6	0	1	3	0	2
2988	6	0	3	3	0	1	1	0	1
2989	3	1	1	1	0	0	1	0	0
2990	5	0	0	5	0	2	1	0	2
2991	2	0	0	2	0	1	1	0	0
2992	11	0	1	10	0	5	3	0	2
2993	9	2	3	4	0	2	2	0	0
2994	4	0	1	3	0	2	1	0	0
2995	3	2	1	0	0	0	0	0	0
2996	2	1	0	1	0	1	0	0	0
2997	2	0	0	2	0	1	1	0	0
2998	2	0	0	2	0	0	1	0	1
2999	2	0	0	2	0	1	0	0	1
3000	2	0	1	1	0	0	1	0	0

IMPS Statistics Catalog

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3002	1	0	0	1	0	1	0	0	0
3003	2	1	1	0	0	0	0	0	0
3004	2	0	0	2	0	1	0	0	1
3005	4	0	1	3	0	1	1	0	1
3006	2	1	0	1	0	0	0	0	1
3007	2	0	0	2	0	0	0	0	2
3008	2	0	0	2	0	1	1	0	0
3009	10	2	0	8	0	3	3	0	2
3010	8	0	2	6	0	4	1	0	1
3011	6	0	2	4	0	1	2	0	1
3012	9	0	0	9	0	1	4	0	4
3013	2	1	0	1	0	0	1	0	0
3014	2	0	0	2	0	0	0	0	2
3015	4	0	0	4	0	1	0	0	3
3016	0	0	0	0	0	0	0	0	0
3017	4	2	1	1	0	1	0	0	0
3018	0	0	0	0	0	0	0	0	0
3019	0	0	0	0	0	0	0	0	0
3020	10	0	1	9	0	3	5	0	1
3021	0	0	0	0	0	0	0	0	0
3022	2	0	0	2	0	0	0	0	2
3023	0	0	0	0	0	0	0	0	0
3024	4	3	1	0	0	0	0	0	0
3025	2	0	2	0	0	0	0	0	0
3026	2	1	0	1	0	0	0	0	1
3027	2	1	0	1	0	0	1	0	0
3028	6	5	1	0	0	0	0	0	0
3029	2	0	0	2	0	1	1	0	0
3030	1	0	0	1	0	0	1	0	0
3031	3	0	0	3	0	1	1	0	1
3032	6	1	0	5	0	1	1	0	3
3033	0	0	0	0	0	0	0	0	0
3034	5	0	0	5	0	2	3	0	0
3035	4	0	1	3	0	0	0	0	3
3036	4	3	1	0	0	0	0	0	0
3037	4	3	0	1	0	0	1	0	0
3038	0	0	0	0	0	0	0	0	0
3039	2	0	0	2	0	1	1	0	0
3040	0	0	0	0	0	0	0	0	0
3041	2	0	0	2	0	0	1	0	1
3042	2	0	0	2	0	0	1	0	1
3043	0	0	0	0	0	0	0	0	0
3044	3	3	0	0	0	0	0	0	0
3045	3	0	3	0	0	0	0	0	0
3046	2	2	0	0	0	0	0	0	0
3047	2	0	0	2	0	1	0	0	1
3048	2	0	0	2	0	0	1	0	1
3049	6	0	0	6	0	1	3	0	2
3050	2	0	0	2	0	1	0	0	1
3051	4	1	0	3	0	0	2	0	1
3052	7	1	3	3	0	0	2	0	1
3053	6	0	1	5	0	1	2	0	2
3054	2	2	0	0	0	0	0	0	0
3055	3	0	0	3	0	0	1	0	2
3056	9	2	0	7	0	0	4	0	3
3057	2	0	0	2	0	0	0	0	2
3058	3	0	0	3	0	0	2	0	1
3059	2	0	0	2	0	1	1	0	0
3060	1	0	0	1	0	1	0	0	0
3061	2	0	1	1	0	0	0	0	1
3062	5	3	2	0	0	0	0	0	0
3063	6	4	2	0	0	0	0	0	0
3064	2	0	0	2	0	1	1	0	0
3065	0	0	0	0	0	0	0	0	0
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3068	6	0	1	5	0	2	1	0	2
3069	0	0	0	0	0	0	0	0	0
3070	0	0	0	0	0	0	0	0	0
3071	1	0	1	0	0	0	0	0	0
3072	4	0	0	4	0	1	1	0	2
3073	0	0	0	0	0	0	0	0	0
3074	0	0	0	0	0	0	0	0	0
3075	3	0	0	3	0	0	1	0	2
3076	0	0	0	0	0	0	0	0	0
3077	0	0	0	0	0	0	0	0	0
3078	5	3	1	1	0	0	0	0	1
3079	0	0	0	0	0	0	0	0	0
3080	5	0	0	5	0	2	2	0	1
3081	2	0	0	2	0	0	0	0	2
3082	5	2	0	3	0	0	2	0	1
3083	4	0	0	4	0	1	2	0	1
3084	4	0	0	4	0	1	1	0	2
3085	0	0	0	0	0	0	0	0	0
3086	0	0	0	0	0	0	0	0	0
3087	2	0	0	2	0	1	0	0	1
3088	5	0	1	4	0	0	3	0	1
3089	4	3	1	0	0	0	0	0	0
3090	4	0	0	4	0	2	1	0	1
3091	2	0	0	2	0	0	1	0	1
3092	5	1	2	2	0	0	0	0	2
3093	5	0	0	5	0	2	2	0	1
3094	5	3	2	0	0	0	0	0	0
3095	6	0	1	5	0	3	2	0	0
3096	4	0	0	4	0	1	2	0	1
3097	4	0	2	2	0	1	0	0	1
3098	4	0	0	4	0	1	1	0	2
3099	2	0	0	2	0	1	1	0	0
3100	0	0	0	0	0	0	0	0	0
3101	4	0	0	4	0	2	1	0	1
3102	6	0	0	6	0	2	2	0	2
3103	0	0	0	0	0	0	0	0	0
3104	9	1	1	7	0	2	1	0	4
3105	2	0	1	1	0	1	0	0	0
3106	6	0	1	5	0	1	2	0	2
3107	4	0	0	4	0	2	2	0	0
3108	0	0	0	0	0	0	0	0	0
3109	4	3	1	0	0	0	0	0	0
3110	2	0	0	2	0	1	0	0	1
3111	0	0	0	0	0	0	0	0	0
3112	6	0	0	6	0	1	2	0	3
3113	0	0	0	0	0	0	0	0	0
3114	4	0	0	4	0	1	2	0	1
3115	6	4	2	0	0	0	0	0	0
3116	6	0	0	6	0	2	3	0	1
3117	4	0	0	4	0	2	1	0	1
3118	5	4	1	0	0	0	0	0	0
3119	0	0	0	0	0	0	0	0	0
3120	9	0	1	8	0	1	4	0	3
3121	2	0	0	2	0	1	0	0	1
3122	6	0	1	5	0	1	1	0	3
3123	4	0	0	4	0	2	1	0	1
3124	4	0	0	4	0	2	2	0	0
3125	7	0	0	7	0	2	4	0	1
3126	6	0	0	6	0	2	1	0	3
3127	5	0	0	5	0	1	2	0	2
3128	9	0	1	8	0	3	4	0	1
3129	7	0	1	6	0	3	3	0	0
3130	7	0	0	7	0	2	4	0	1
3131	6	0	0	6	0	0	3	0	3
3132	8	1	4	3	0	0	3	0	0
3133	4	0	0	4	0	2	2	0	0
3134	4	1	0	3	0	2	1	0	0
3135	7	0	0	7	0	2	3	0	2
3136	5	0	0	5	0	2	3	0	0
3137	0	0	0	0	0	0	0	0	0
3138	6	0	0	6	0	1	2	0	3
3139	6	5	1	0	0	0	0	0	0
3140	4	4	0	0	0	0	0	0	0
3141	9	5	3	1	0	1	0	0	0
3142	8	0	0	8	0	3	3	0	2
3143	8	0	0	8	0	2	4	0	2
3144	5	0	0	5	0	2	3	0	0
3145	6	0	0	6	0	2	3	0	1
3146	7	0	0	7	0	0	2	0	5
3147	6	0	0	6	0	2	3	0	1
3148	6	0	1	5	0	1	1	0	3
3149	5	0	1	4	0	1	1	0	2
3150	4	3	0	1	0	0	0	0	1

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
3151	6	0	1	5	0	1	2	0	2
3152	10	9	1	0	0	0	0	0	0
3153	9	0	0	9	0	3	4	0	2
3154	8	0	1	7	0	2	2	0	3
3155	6	0	0	6	0	1	2	0	3
3156	8	4	3	1	0	0	1	0	0
3157	9	3	0	6	0	3	2	3	0
3158	12	0	0	12	0	2	3	0	7
3159	11	0	0	11	0	4	4	0	3
3160	6	0	0	6	0	1	2	0	3
3161	11	5	4	2	0	0	1	0	1
3162	7	0	0	7	0	1	0	0	6
3163	4	0	0	4	0	2	1	0	1
3164	5	2	0	3	0	0	2	0	1
3165	4	0	0	4	0	2	2	0	0
3166	7	0	1	6	0	0	3	0	3
3167	8	2	2	4	0	2	1	0	1
3168	8	2	1	5	0	2	0	0	3
3169	5	0	0	5	0	1	2	0	2
3170	7	0	0	7	0	2	3	0	2
3171	7	0	1	6	0	2	2	0	2
3172	2	0	0	2	0	1	1	0	0
3173	7	0	0	7	0	2	2	0	3
3174	4	0	0	4	0	1	1	0	2
3175	2	0	1	1	0	0	1	0	0
3176	11	7	3	1	0	0	0	0	1
3177	7	0	2	5	0	2	2	0	1
3178	8	0	0	8	0	3	5	0	0
3179	4	0	0	4	0	2	1	0	1
3180	0	0	0	0	0	0	0	0	0
3181	2	0	0	2	0	1	0	0	1
3182	7	0	0	7	0	3	3	0	1
3183	6	0	3	3	0	1	2	0	0
3184	8	0	3	5	0	1	2	0	2
3185	0	0	0	0	0	0	0	0	0
3186	7	0	0	7	0	2	4	2	0
3187	9	0	1	8	0	2	4	0	2
3188	2	0	0	2	0	0	1	0	1
3189	8	0	1	7	0	2	2	0	3
3190	4	0	0	4	0	2	2	0	0
3191	7	0	0	7	0	1	2	0	4
3192	7	0	0	7	0	1	3	0	3
3193	7	0	0	7	0	3	4	0	0
3194	4	0	1	3	0	1	2	0	0
3195	2	0	0	2	0	1	1	0	0
3196	2	0	1	1	0	0	0	0	1
3197	8	2	1	5	0	2	3	0	0
3198	8	0	0	8	0	2	3	0	3
3199	9	0	0	9	0	4	1	0	4
3200	7	6	1	0	0	0	0	0	0
3201	12	0	0	12	0	3	5	2	3
3202	8	0	0	8	0	4	2	0	2
3203	4	0	0	4	0	1	2	0	1
3204	6	0	1	5	0	0	2	0	3
3205	9	0	0	9	0	4	2	0	3
3206	7	0	0	7	0	3	2	0	2
3207	4	0	0	4	0	2	2	0	0
3208	5	0	0	5	0	1	3	0	1
3209	6	0	0	6	0	1	3	0	2
3210	4	0	2	2	0	0	2	0	0
3211	6	0	1	5	0	1	1	0	3
3212	8	0	0	8	0	3	2	0	3
3213	0	0	0	0	0	0	0	0	0
3214	6	0	3	3	0	0	2	0	1
3215	6	0	2	4	0	2	1	0	1
3216	5	0	0	5	0	1	3	0	1
3217	7	0	0	7	0	2	3	0	2
3218	8	0	0	8	0	2	2	0	4
3219	10	0	1	9	0	2	3	6	1
3220	11	0	0	11	0	4	4	0	3
3221	4	0	1	3	0	1	1	0	1
3222	9	7	2	0	0	0	0	0	0
3223	8	1	2	5	0	1	2	0	2
3224	3	1	2	0	0	0	0	0	0
3225	0	0	0	0	0	0	0	0	0
3226	10	0	0	10	0	3	2	0	5
3227	11	0	1	10	0	3	4	0	3
3228	3	0	1	2	0	0	2	0	0
3229	8	0	1	7	0	3	0	0	4
3230	12	4	3	5	0	2	3	0	0
3231	9	0	3	6	0	2	3	0	1
3232	9	0	1	8	0	2	5	0	1
3233	6	0	0	6	0	3	3	0	0
3234	6	0	1	5	0	3	0	0	2
3235	4	0	0	4	0	0	0	0	4
3236	8	0	0	8	0	4	3	2	1
3237	8	4	1	3	0	1	2	0	0
3238	9	0	1	8	0	1	4	0	3
3239	4	0	0	4	0	2	2	0	0
3240	4	0	0	4	0	2	2	0	0
3241	4	0	1	3	0	2	1	0	0
3242	5	0	0	5	0	1	3	0	1
3243	2	0	0	2	0	1	0	0	1
3244	6	0	1	5	0	2	3	0	0
3245	7	0	0	7	0	3	3	0	1
3246	8	0	2	6	0	2	4	0	0
3247	9	3	1	5	0	1	2	2	2
3248	8	5	0	3	0	1	1	0	1
3249	2	0	0	2	0	1	1	0	0
3250	4	0	0	4	0	2	2	0	0
3251	5	0	1	4	0	2	2	0	0
3252	5	0	0	5	0	2	3	0	0
3253	2	0	1	1	0	0	0	0	1
3254	2	0	1	1	0	0	1	0	0
3255	7	0	1	6	0	3	2	0	1
3256	4	2	1	1	0	1	0	0	0
3257	6	0	0	6	0	2	2	0	2
3258	5	0	0	5	0	2	3	0	0
3259	7	0	3	4	0	1	3	0	0
3260	12	0	0	12	0	6	6	0	0
3261	6	0	0	6	0	2	2	0	2
3262	2	0	0	2	0	1	1	0	0
3263	2	0	0	2	0	0	1	0	1
3264	2	1	1	0	0	0	0	0	0
3265	2	0	0	2	0	0	1	0	1
3266	8	0	0	8	0	3	2	0	3
3267	11	1	0	10	0	3	4	0	3
3268	2	0	0	2	0	0	1	0	1
3269	5	0	1	4	0	1	1	0	2
3270	8	0	0	8	0	3	3	0	2
3271	3	0	0	3	0	1	2	0	0
3272	0	0	0	0	0	0	0	0	0
3273	9	5	2	2	0	1	0	0	1
3274	2	0	0	2	0	0	0	0	2
3275	7	0	1	6	0	2	2	0	2
3276	2	0	0	2	0	0	0	0	2
3277	2	0	0	2	0	1	1	0	0
3278	2	2	0	0	0	0	0	0	0
3279	6	0	0	6	0	3	1	0	2
3280	5	0	1	4	0	0	1	0	3
3281	5	0	0	5	0	1	3	0	1
3282	8	0	0	8	0	3	1	0	4
3283	8	2	1	5	0	1	2	0	2
3284	4	0	0	4	0	2	2	0	0
3285	8	5	1	2	0	1	0	0	1
3286	2	0	0	2	0	0	1	0	1
3287	2	0	0	2	0	1	1	0	0
3288	5	0	0	5	0	1	2	0	2
3289	12	0	1	11	0	1	5	0	5
3290	3	0	0	3	0	1	2	0	0
3291	2	0	1	1	0	1	0	0	0
3292	3	0	1	2	0	1	1	0	0
3293	2	0	0	2	0	0	0	0	2
3294	2	0	0	2	0	0	1	0	1
3295	8	0	0	8	0	3	4	0	1
3296	7	0	0	7	0	2	4	3	0
3297	4	0	0	4	0	1	1	0	2
3298	10	3	2	5	0	1	1	0	3
3299	6	0	0	6	0	1	3	0	2
3300	4	0	1	3	0	1	1	0	1

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
3301	1	0	0	1	0	1	0	0	0
3302	5	0	0	5	0	0	1	0	4
3303	4	0	0	4	0	0	1	0	3
3304	8	0	0	8	0	3	3	0	2
3305	2	0	1	1	0	0	1	0	0
3306	2	0	0	2	0	1	1	0	0
3307	3	1	0	2	0	1	1	0	0
3308	6	0	0	6	0	3	2	0	1
3309	7	0	0	7	0	2	2	0	3
3310	5	0	3	2	0	1	1	0	0
3311	4	2	1	1	0	0	0	0	1
3312	10	0	4	6	0	2	2	0	2
3313	2	0	0	2	0	0	1	0	1
3314	3	0	0	3	0	1	2	0	0
3315	0	0	0	0	0	0	0	0	0
3316	4	0	1	3	0	2	0	0	1
3317	4	3	1	0	0	0	0	0	0
3318	2	1	0	1	0	0	0	0	1
3319	4	0	0	4	0	0	1	0	3
3320	0	0	0	0	0	0	0	0	0
3321	5	0	0	5	0	1	2	0	2
3322	0	0	0	0	0	0	0	0	0
3323	6	0	0	6	0	3	1	0	2
3324	7	2	2	3	0	0	1	0	2
3325	8	6	2	0	0	0	0	0	0
3326	4	1	0	3	0	1	2	0	0
3327	2	0	0	2	0	1	1	0	0
3328	4	0	0	4	0	1	2	0	1
3329	10	0	0	10	0	4	3	0	3
3330	0	0	0	0	0	0	0	0	0
3331	5	0	1	4	0	1	2	0	1
3332	3	0	0	3	0	1	1	0	1
3333	4	0	1	3	0	0	2	0	1
3334	4	0	0	4	0	1	1	0	2
3335	4	0	2	2	0	2	0	0	0
3336	6	0	1	5	0	1	0	0	4
3337	6	0	0	6	0	3	2	0	1
3338	3	0	0	3	0	1	0	0	2
3339	6	6	0	0	0	0	0	0	0
3340	2	0	0	2	0	1	0	0	1
3341	4	0	0	4	0	0	2	0	2
3342	6	0	1	5	0	1	3	0	1
3343	2	0	0	2	0	1	0	0	1
3344	6	0	0	6	0	3	2	0	1
3345	6	6	0	0	0	0	0	0	0
3346	12	5	5	2	0	0	1	0	1
3347	4	0	0	4	0	2	2	0	0
3348	4	0	0	4	0	1	2	0	1
3349	4	0	0	4	0	2	1	0	1
3350	15	0	0	15	0	5	8	0	2
3351	4	0	0	4	0	2	2	0	0
3352	0	0	0	0	0	0	0	0	0
3353	15	6	4	5	0	0	3	0	2
3354	0	0	0	0	0	0	0	0	0
3355	0	0	0	0	0	0	0	0	0
3356	0	0	0	0	0	0	0	0	0
3357	4	0	1	3	0	2	1	0	0
3358	6	0	0	6	0	2	3	0	1
3359	6	0	0	6	0	3	2	0	1
3360	5	0	0	5	0	2	2	0	1
3361	0	0	0	0	0	0	0	0	0
3362	0	0	0	0	0	0	0	0	0
3363	2	0	0	2	0	1	1	0	0
3364	0	0	0	0	0	0	0	0	0
3365	2	0	0	2	0	1	1	0	0
3366	4	0	0	4	0	2	2	0	0
3367	9	0	1	8	0	3	3	0	2
3368	9	6	0	3	0	0	2	0	1
3369	7	0	1	6	0	4	1	0	1
3370	0	0	0	0	0	0	0	0	0
3371	2	0	0	2	0	0	0	0	2
3372	4	0	1	3	0	1	0	0	2
3373	5	0	1	4	0	1	1	0	2
3374	2	0	0	2	0	1	1	0	0
3375	0	0	0	0	0	0	0	0	0
3376	2	0	0	2	0	1	1	0	0
3377	7	0	0	7	0	0	2	0	5
3378	6	0	0	6	0	2	2	0	2
3379	9	4	2	3	0	1	1	0	1
3380	5	0	2	3	0	1	1	0	1
3381	7	0	0	7	0	2	3	0	2
3382	5	0	1	4	0	2	0	0	2
3383	2	0	0	2	0	1	1	0	0
3384	6	0	0	6	0	1	1	0	4
3385	2	0	0	2	0	1	0	0	1
3386	2	0	0	2	0	0	1	0	1
3387	4	0	1	3	0	2	1	0	0
3388	8	0	0	8	0	3	3	1	2
3389	3	1	1	1	0	0	1	0	0
3390	0	0	0	0	0	0	0	0	0
3391	7	0	2	5	0	2	2	0	1
3392	2	0	0	2	0	1	1	0	0
3393	4	0	0	4	0	2	2	0	0
3394	12	0	1	11	0	3	4	0	4
3395	7	0	0	7	0	2	3	0	2
3396	9	6	2	1	0	1	0	0	0
3397	11	0	2	9	0	3	1	0	5
3398	8	0	1	7	0	1	3	0	3
3399	7	0	1	6	0	3	3	0	0
3400	0	0	0	0	0	0	0	0	0
3401	6	0	1	5	0	2	1	0	2
3402	4	0	0	4	0	2	1	0	1
3403	4	0	1	3	0	1	0	0	2
3404	9	0	0	9	0	5	2	0	2
3405	5	5	0	0	0	0	0	0	0
3406	7	2	2	3	0	0	0	0	3
3407	9	0	1	8	0	3	3	1	2
3408	4	0	0	4	0	2	1	0	1
3409	2	0	0	2	0	1	1	0	0
3410	5	0	0	5	0	0	2	0	3
3411	6	0	0	6	0	0	1	0	5
3412	4	0	1	3	0	1	2	0	0
3413	5	0	0	5	0	1	3	0	1
3414	5	0	0	5	0	1	3	0	1
3415	4	2	1	1	0	0	1	0	0
3416	7	0	1	6	0	1	2	0	3
3417	0	0	0	0	0	0	0	0	0
3418	11	2	1	8	0	3	3	0	2
3419	7	5	2	0	0	0	0	0	0
3420	15	0	0	15	0	4	6	0	5
3421	6	0	0	6	0	3	2	0	1
3422	7	0	0	7	0	2	1	0	4
3423	6	0	1	5	0	1	2	0	2
3424	9	0	0	9	0	4	4	0	1
3425	8	1	1	6	0	1	3	0	2
3426	6	0	3	3	0	1	2	0	0
3427	6	0	0	6	0	1	1	0	4
3428	6	0	2	4	0	1	1	0	2
3429	4	0	1	3	0	1	2	0	0
3430	5	0	0	5	0	1	2	0	2
3431	6	0	2	4	0	1	2	0	1
3432	2	0	0	2	0	0	0	0	2
3433	7	0	0	7	0	3	3	0	1
3434	4	0	0	4	0	2	1	0	1
3435	6	0	0	6	0	2	3	0	1
3436	4	0	0	4	0	1	1	0	2
3437	0	0	0	0	0	0	0	0	0
3438	6	0	1	5	0	1	3	0	1
3439	4	0	0	4	0	1	1	0	2
3440	5	0	0	5	0	2	2	0	1
3441	4	0	0	4	0	2	2	0	0
3442	8	4	1	3	0	1	1	0	1
3443	5	0	2	3	0	1	0	0	2
3444	6	0	0	6	0	1	2	0	3
3445	8	6	0	2	0	1	0	0	1
3446	6	0	1	5	0	1	2	0	2
3447	7	0	1	6	0	1	0	0	5
3448	9	0	0	9	0	1	3	0	5
3449	4	0	1	3	0	0	2	0	1
3450	0	0	0	0	0	0	0	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
3451	0	0	0	0	0	0	0	0	0
3452	11	0	1	10	0	2	4	0	4
3453	7	0	0	7	0	3	3	0	1
3454	8	0	0	8	0	1	4	0	3
3455	0	0	0	0	0	0	0	0	0
3456	2	0	0	2	0	0	1	0	1
3457	4	0	0	4	0	0	1	0	3
3458	7	0	0	7	0	3	3	0	1
3459	5	0	0	5	0	1	2	2	1
3460	13	0	1	12	0	3	3	0	6
3461	6	2	0	4	0	0	3	0	1
3462	5	0	0	5	0	2	2	0	1
3463	9	0	2	7	0	4	3	0	0
3464	8	0	1	7	0	2	1	0	4
3465	10	0	0	10	0	4	5	0	1
3466	6	0	1	5	0	1	2	0	2
3467	8	1	1	6	0	2	3	0	1
3468	4	0	1	3	0	0	0	0	3
3469	2	0	0	2	0	1	1	0	0
3470	10	1	4	5	0	3	2	0	0
3471	4	1	1	2	0	1	1	0	0
3472	4	0	2	2	0	2	0	0	0
3473	7	0	0	7	0	3	3	0	1
3474	9	0	2	7	0	1	4	0	2
3475	4	3	0	1	0	0	1	0	0
3476	1	1	0	0	0	0	0	0	0
3477	6	0	1	5	0	3	2	0	0
3478	2	1	0	1	0	0	0	0	1
3479	0	0	0	0	0	0	0	0	0
3480	5	0	1	4	0	1	2	0	1
3481	10	0	3	7	0	1	3	0	3
3482	1181	0	1	17	0	3	4	0	10
3483	8	0	0	8	0	3	2	0	3
3484	2	0	0	2	0	0	0	0	2
3485	13	9	1	3	0	0	2	0	1
3486	2	0	0	2	0	1	0	0	1
3487	2	0	0	2	0	1	1	0	0
3488	8	0	1	7	0	3	3	0	1
3489	7	0	0	7	0	3	2	0	2
3490	11	0	0	11	0	3	4	0	4
3491	8	0	0	8	0	3	2	0	3
3492	2	0	0	2	0	0	1	0	1
3493	13	0	1	12	0	2	4	0	6
3494	6	0	1	5	0	1	2	0	2
3495	2	0	1	1	0	0	1	0	0
3496	4	0	0	4	0	1	1	0	2
3497	3	0	0	3	0	1	2	0	0
3498	2	0	0	2	0	1	0	0	1
3499	4	0	0	4	0	1	2	0	1
3500	2	0	0	2	0	1	0	0	1
3501	7	2	1	4	0	1	2	0	1
3502	4	0	0	4	0	0	2	0	2
3503	2	0	0	2	0	0	1	0	1
3504	7	0	1	6	0	3	2	0	1
3505	4	0	0	4	0	2	0	0	2
3506	8	0	0	8	0	2	5	0	1
3507	2	0	0	2	0	1	1	0	0
3508	2	0	0	2	0	1	0	0	1
3509	2	0	0	2	0	1	0	0	1
3510	1	0	0	1	0	1	0	0	0
3511	0	0	0	0	0	0	0	0	0
3512	3	0	0	3	0	2	0	0	1
3513	4	0	2	2	0	1	0	0	1
3514	4	0	0	4	0	1	0	0	3
3515	2	0	0	2	0	0	1	0	1
3516	5	0	0	5	0	1	2	0	2
3517	5	0	0	5	0	1	2	0	2
3518	2	0	0	2	0	1	0	0	1
3519	2	0	0	2	0	0	0	0	2
3520	2	0	0	2	0	1	0	0	1
3521	1	0	0	1	0	0	0	0	1
3522	4	2	0	2	0	1	0	0	1
3523	2	0	0	2	0	1	0	0	1
3524	3	0	0	3	0	2	1	0	0
3525	2	0	1	1	0	0	0	0	1
3526	4	1	0	3	0	0	1	0	2
3527	2	0	0	2	0	1	1	0	0
3528	2	0	0	2	0	1	0	0	1
3529	3	0	1	2	0	0	2	0	0
3530	5	0	1	4	0	0	2	0	2
3531	6	0	0	6	0	1	2	0	3
3532	7	1	0	6	0	3	1	0	2
3533	3	0	0	3	0	1	2	0	0
3534	6	0	1	5	0	2	2	0	1
3535	3	0	0	3	0	0	1	0	2
3536	3	0	1	2	0	1	1	0	0
3537	2	0	0	2	0	1	1	0	0
3538	5	0	1	4	0	1	1	0	2
3539	7	0	0	7	0	3	3	0	1
3540	0	0	0	0	0	0	0	0	0
3541	6	0	1	5	0	2	1	0	2
3542	4	0	0	4	0	2	1	0	1
3543	5	0	0	5	0	2	1	0	2
3544	4	0	0	4	0	2	2	0	0
3545	6	0	0	6	0	2	3	0	1
3546	6	0	0	6	0	3	3	0	0
3547	0	0	0	0	0	0	0	0	0
3548	9	4	2	3	0	0	3	0	0
3549	9	0	1	8	0	4	4	0	0
3550	4	0	0	4	0	1	0	0	3
3551	7	0	0	7	0	3	3	0	1
3552	0	0	0	0	0	0	0	0	0
3553	9	0	2	7	0	2	2	0	3
3554	16	1	1	14	0	4	6	0	4
3555	5	0	1	4	0	1	3	0	0
3556	4	0	0	4	0	2	2	0	0
3557	6	0	0	6	0	3	2	0	1
3558	2	0	0	2	0	1	1	0	0
3559	9	0	1	8	0	2	4	0	2
3560	4	2	0	2	0	1	0	0	1
3561	8	4	2	2	0	0	1	0	1
3562	2	0	0	2	0	0	0	0	2
3563	2	0	0	2	0	1	1	0	0
3564	7	5	2	0	0	0	0	0	0
3565	8	0	2	6	0	1	4	0	1
3566	0	0	0	0	0	0	0	0	0
3567	6	0	0	6	0	2	3	0	1
3568	6	0	0	6	0	0	0	0	6
3569	0	0	0	0	0	0	0	0	0
3570	5	3	1	1	0	0	1	0	0
3571	9	2	2	5	0	1	1	0	3
3572	5	0	0	5	0	1	3	0	1
3573	3	0	0	3	0	2	1	0	0
3574	0	0	0	0	0	0	0	0	0
3575	5	0	0	5	0	1	3	0	1
3576	0	0	0	0	0	0	0	0	0
3577	8	0	0	8	0	2	4	0	2
3578	4	4	0	0	0	0	0	0	0
3579	8	0	0	8	0	3	3	0	2
3580	3	0	0	3	0	1	1	0	1
3581	5	0	0	5	0	1	3	0	1
3582	4	0	1	3	0	0	1	0	2
3583	0	0	0	0	0	0	0	0	0
3584	3	3	0	0	0	0	0	0	0
3585	6	0	0	6	0	1	2	0	3
3586	2	0	0	2	0	0	0	0	2
3587	8	1	0	7	0	3	3	0	1
3588	3	0	0	3	0	1	2	0	0
3589	2	0	0	2	0	1	1	0	0
3590	3	0	0	3	0	1	2	0	0
3591	11	3	0	8	0	3	3	0	2
3592	0	0	0	0	0	0	0	0	0
3593	3	0	0	3	0	1	2	0	0
3594	6	0	1	5	0	1	2	0	2
3595	3	0	0	3	0	1	1	0	1
3596	7	0	4	3	0	0	1	0	2
3597	4	0	0	4	0	2	2	0	0
3598	7	2	1	4	0	2	1	0	1
3599	7	0	2	5	0	1	3	0	1
3600	3	0	0	3	0	1	1	0	1

IMPS Statistics Catalog

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3603	4	0	0	4	0	2	2	0	0
3604	4	0	1	3	0	0	2	0	1
3605	2	0	0	2	0	1	0	0	1
3606	5	0	1	4	0	2	1	0	1
3607	0	0	0	0	0	0	0	0	0
3608	6	0	1	5	0	1	1	0	3
3609	5	0	0	5	0	1	1	0	3
3610	2	0	0	2	0	1	1	0	0
3611	4	0	0	4	0	1	1	0	2
3612	2	0	0	2	0	0	1	0	1
3613	0	0	0	0	0	0	0	0	0
3614	6	5	1	0	0	0	0	0	0
3615	2	0	0	2	0	0	0	0	2
3616	4	0	0	4	0	1	1	0	2
3617	4	0	0	4	0	2	2	0	0
3618	7	0	0	7	0	3	2	0	2
3619	2	0	0	2	0	1	1	0	0
3620	6	0	1	5	0	1	2	0	2
3621	4	0	1	3	0	1	2	0	0
3622	5	0	1	4	0	2	2	0	0
3623	5	0	0	5	0	1	2	0	2
3624	0	0	0	0	0	0	0	0	0
3625	6	0	1	5	0	1	3	0	1
3626	4	0	1	3	0	1	2	0	0
3627	0	0	0	0	0	0	0	0	0
3628	2	0	1	1	0	1	0	0	0
3629	7	0	0	7	0	1	3	0	3
3630	7	1	0	6	0	1	2	0	3
3631	16	10	3	3	0	1	2	0	0
3632	7	0	0	7	0	3	3	0	1
3633	11	0	2	9	0	2	3	0	4
3634	5	0	0	5	0	2	3	0	0
3635	4	0	0	4	0	2	2	0	0
3636	0	0	0	0	0	0	0	0	0
3637	7	2	0	5	0	0	2	0	3
3638	6	0	0	6	0	0	2	0	4
3639	5	0	0	5	0	2	2	0	1
3640	6	0	1	5	0	0	1	0	4
3641	10	8	1	1	0	0	0	0	1
3642	7	7	0	0	0	0	0	0	0
3643	6	0	1	5	0	1	2	0	2
3644	7	0	1	6	0	2	2	0	2
3645	2	0	1	1	0	0	1	0	0
3646	4	0	0	4	0	1	1	0	2
3647	7	7	0	0	0	0	0	0	0
3648	4	0	1	3	0	2	1	0	0
3649	5	0	1	4	0	2	2	0	0
3650	4	2	0	2	0	1	1	0	0
3651	7	0	0	7	0	2	3	0	2
3652	4	0	0	4	0	2	2	0	0
3653	4	0	0	4	0	1	2	0	1
3654	6	0	0	6	0	1	2	0	3
3655	4	0	0	4	0	1	0	0	3
3656	11	0	0	11	0	3	4	0	4
3657	8	0	0	8	0	3	5	0	0
3658	0	0	0	0	0	0	0	0	0
3659	4	0	0	4	0	2	2	0	0
3660	10	5	1	4	0	2	2	0	0
3661	6	0	1	5	0	3	0	0	2
3662	4	0	0	4	0	1	1	0	2
3663	7	0	0	7	0	1	3	0	3
3664	6	0	0	6	0	2	2	0	2
3665	4	0	0	4	0	1	1	0	2
3666	9	4	3	2	0	1	0	0	1
3667	6	0	1	5	0	2	2	0	1
3668	1	0	0	1	0	1	0	0	0
3669	2	0	0	2	0	1	1	0	0
3670	5	0	1	4	0	2	1	0	1
3671	4	0	1	3	3	1	2	0	0
3672	2	0	0	2	0	1	1	0	0
3673	6	0	0	6	0	2	2	0	2
3674	6	0	1	5	0	2	2	0	1
3675	4	0	1	3	0	1	1	0	1
3676	0	0	0	0	0	0	0	0	0
3677	3	0	0	3	0	0	1	0	2
3678	10	0	1	9	0	3	2	2	4
3679	2	0	0	2	0	1	1	0	0
3680	10	0	0	10	0	4	4	0	2
3681	4	0	1	3	0	2	1	0	0
3682	4	2	0	2	0	1	1	0	0
3683	4	0	1	3	0	2	0	0	1
3684	8	2	0	6	0	3	1	0	2
3685	9	2	0	7	0	3	4	0	0
3686	13	6	2	5	0	1	2	0	2
3687	5	3	0	2	0	0	1	0	1
3688	6	0	0	6	0	3	2	0	1
3689	2	0	0	2	0	1	1	0	0
3690	4	0	0	4	0	1	0	0	3
3691	3	0	0	3	0	2	1	0	0
3692	7	0	0	7	0	2	2	0	3
3693	2	0	1	1	0	0	0	0	1
3694	9	4	3	2	0	0	1	0	1
3695	8	0	0	8	0	1	3	0	4
3696	4	0	1	3	0	1	1	0	1
3697	0	0	0	0	0	0	0	0	0
3698	5	0	0	5	0	2	2	0	1
3699	8	0	0	8	0	4	3	0	1
3700	7	0	0	7	0	2	4	3	0
3701	7	0	0	7	0	3	3	0	1
3702	2	2	0	0	0	0	0	0	0
3703	0	0	0	0	0	0	0	0	0
3704	9	0	2	7	0	2	2	0	3
3705	5	0	0	5	0	2	3	0	0
3706	11	0	2	9	0	3	4	0	2
3707	4	0	0	4	0	2	2	0	0
3708	4	2	1	1	0	0	0	0	1
3709	6	4	2	0	0	0	0	0	0
3710	4	0	0	4	0	2	2	0	0
3711	5	0	0	5	0	1	2	0	2
3712	5	0	0	5	0	1	1	0	3
3713	2	0	1	1	0	0	0	0	1
3714	5	2	0	3	0	1	1	0	1
3715	7	0	1	6	0	1	2	0	3
3716	12	0	1	11	0	3	7	0	1
3717	2	0	1	1	0	0	1	0	0
3718	2	0	0	2	0	0	0	0	2
3719	4	0	0	4	0	1	1	0	2
3720	5	0	0	5	0	2	3	0	0
3721	3	0	0	3	0	1	1	0	1
3722	8	0	0	8	0	2	3	0	3
3723	6	0	2	4	0	1	2	0	1
3724	4	2	2	0	0	0	0	0	0
3725	9	0	1	8	0	2	4	0	2
3726	2	0	1	1	0	1	0	0	0
3727	3	0	1	2	0	1	1	0	0
3728	8	4	2	2	0	2	0	0	0
3729	7	0	1	6	0	3	1	0	2
3730	3	1	1	1	0	0	1	0	0
3731	3	2	1	0	0	0	0	0	0
3732	6	0	1	5	0	1	2	0	2
3733	5	0	0	5	0	2	2	0	1
3734	6	0	0	6	0	1	3	0	2
3735	2	0	1	1	0	0	0	0	1
3736	3	0	0	3	0	1	2	0	0
3737	6	0	2	4	0	2	2	0	0
3738	11	0	0	11	0	3	4	0	4
3739	8	0	1	7	0	3	0	0	4
3740	7	0	1	6	0	3	2	0	1
3741	6	0	0	6	0	2	3	0	1
3742	10	0	0	10	0	3	3	0	4
3743	9	0	0	9	0	3	4	0	2
3744	9	7	1	1	0	0	0	0	1
3745	5	0	0	5	0	2	1	0	2
3746	10	0	1	9	0	4	2	0	3
3747	4	3	0	1	0	1	0	0	0
3748	2	0	0	2	0	1	1	0	0
3749	7	0	0	7	0	2	2	0	3
3750	2	0	0	2	0	1	1	0	0

IMPS Statistics Catalog

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3752	10	0	0	10	0	4	4	0	2
3753	12	0	2	10	0	4	4	0	2
3754	10	8	2	0	0	0	0	0	0
3755	9	0	0	9	0	1	4	0	4
3756	3	0	0	3	0	1	1	0	1
3757	7	0	0	7	0	3	3	0	1
3758	2	0	0	2	0	0	1	0	1
3759	2	2	0	0	0	0	0	0	0
3760	5	0	0	5	0	2	2	0	1
3761	6	0	1	5	0	3	2	0	0
3762	6	0	0	6	0	2	3	0	1
3763	4	0	0	4	0	1	2	0	1
3764	2	0	0	2	0	0	1	0	1
3765	2	0	0	2	0	1	1	0	0
3766	4	0	1	3	0	1	1	0	1
3767	4	0	1	3	0	1	2	0	0
3768	4	0	0	4	0	2	2	0	0
3769	9	0	0	9	0	4	3	0	2
3770	6	0	0	6	0	2	2	0	2
3771	7	0	0	7	0	1	4	0	2
3772	4	1	1	2	0	1	0	0	1
3773	8	0	0	8	0	3	4	0	1
3774	4	0	0	4	0	0	1	0	3
3775	4	0	1	3	0	1	2	0	0
3776	6	5	1	0	0	0	0	0	0
3777	2	0	0	2	0	0	1	0	1
3778	4	0	0	4	0	2	2	0	0
3779	2	0	1	1	0	1	0	0	0
3780	5	0	1	4	0	1	1	0	2
3781	13	1	1	11	0	4	2	0	5
3782	3	0	0	3	0	0	2	0	1
3783	2	0	0	2	0	0	1	0	1
3784	8	4	1	3	0	1	2	0	0
3785	4	0	0	4	0	1	1	0	2
3786	2	0	0	2	0	1	1	0	0
3787	4	0	1	3	0	1	2	0	0
3788	3	0	0	3	0	1	2	0	0
3789	0	0	0	0	0	0	0	0	0
3790	2	0	0	2	0	1	0	0	1
3791	4	0	0	4	0	1	1	0	2
3792	4	0	0	4	0	2	1	0	1
3793	9	7	1	1	0	0	1	0	0
3794	7	0	0	7	0	3	2	0	2
3795	5	0	1	4	0	1	2	0	1
3796	4	0	1	3	0	1	1	0	1
3797	5	0	0	5	0	1	2	0	2
3798	8	0	0	8	0	3	2	0	3
3799	11	1	5	5	0	1	1	0	3
3800	2	0	0	2	0	1	1	0	0
3801	4	0	1	3	0	1	1	0	1
3802	8	0	0	8	0	2	5	0	1
3803	5	4	1	0	0	0	0	0	0
3804	7	0	0	7	0	2	4	0	1
3805	9	1	2	6	0	2	2	0	2
3806	7	0	1	6	0	2	3	0	1
3807	4	0	0	4	0	1	1	0	2
3808	5	0	0	5	0	1	2	0	2
3809	4	0	0	4	0	2	1	0	1
3810	4	0	0	4	0	2	2	0	0
3811	0	0	0	0	0	0	0	0	0
3812	10	8	2	0	0	0	0	0	0
3813	5	0	2	3	0	1	2	0	0
3814	5	0	0	5	0	3	2	0	0
3815	7	2	3	2	0	0	0	0	2
3816	4	0	0	4	0	2	1	0	1
3817	8	0	0	8	0	2	3	0	3
3818	7	2	1	4	0	0	2	0	2
3819	4	0	0	4	0	2	2	0	0
3820	2	0	1	1	0	0	1	0	0
3821	9	0	1	8	0	4	3	0	1
3822	2	0	0	2	0	1	1	0	0
3823	6	0	2	4	0	2	0	0	2
3824	1	0	0	1	0	0	1	0	0
3825	4	0	0	4	0	1	2	0	1
3826	6	0	0	6	0	1	2	0	3
3827	6	0	1	5	0	1	2	0	2
3828	4	0	1	3	0	1	1	0	1
3829	4	3	1	0	0	0	0	0	0
3830	4	0	0	4	0	2	2	0	0
3831	4	0	0	4	0	2	1	0	1
3832	4	0	0	4	0	2	1	0	1
3833	2	0	0	2	0	1	1	0	0
3834	5	0	1	4	0	1	2	0	1
3835	6	0	0	6	0	2	2	0	2
3836	2	0	0	2	0	1	0	0	1
3837	2	0	0	2	0	1	1	0	0
3838	2	0	0	2	0	1	0	0	1
3839	6	1	0	5	0	3	2	0	0
3840	8	0	1	7	0	3	1	0	3
3841	8	0	1	7	0	3	3	0	1
3842	7	0	0	7	0	2	3	0	2
3843	9	0	1	8	0	2	3	0	3
3844	2	0	0	2	0	0	0	0	2
3845	18	0	1	17	0	4	6	0	7
3846	9	1	1	7	0	3	2	0	2
3847	6	0	1	5	0	2	3	0	0
3848	2	0	0	2	0	1	1	0	0
3849	3	0	0	3	0	1	0	0	2
3850	3	0	0	3	0	1	1	0	1
3851	2	0	1	1	0	0	0	0	1
3852	11	0	0	11	0	3	5	0	3
3853	5	0	0	5	0	1	3	0	1
3854	4	0	0	4	0	2	1	0	1
3855	8	3	1	4	0	0	1	0	3
3856	4	0	0	4	0	0	1	0	3
3857	0	0	0	0	0	0	0	0	0
3858	5	0	1	4	0	1	1	0	2
3859	8	0	0	8	0	2	2	0	4
3860	4	0	0	4	0	2	2	0	0
3861	4	0	0	4	0	2	2	0	0
3862	8	0	0	8	0	2	3	0	3
3863	4	0	1	3	0	1	1	0	1
3864	7	0	0	7	0	2	4	0	1
3865	4	0	0	4	0	2	1	0	1
3866	0	0	0	0	0	0	0	0	0
3867	3	0	0	3	0	1	1	0	1
3868	7	0	0	7	0	2	2	0	3
3869	2	0	0	2	0	0	1	0	1
3870	6	0	0	6	0	3	3	0	0
3871	6	0	0	6	0	3	2	0	1
3872	9	6	2	1	0	1	0	0	0
3873	8	0	1	7	0	3	2	0	2
3874	13	0	3	10	0	3	2	0	5
3875	2	0	0	2	0	0	0	0	2
3876	12	1	1	10	0	1	2	2	6
3877	4	0	0	4	0	1	0	0	3
3878	2	0	0	2	0	0	0	0	2
3879	7	0	2	5	0	2	0	0	3
3880	5	0	0	5	0	1	3	0	1
3881	0	0	0	0	0	0	0	0	0
3882	5	0	0	5	0	2	3	0	0
3883	2	0	0	2	0	0	1	0	1
3884	7	0	1	6	0	1	1	0	4
3885	4	0	0	4	0	2	1	0	1
3886	4	0	1	3	0	0	1	0	2
3887	0	0	0	0	0	0	0	0	0
3888	5	0	1	4	0	1	2	0	1
3889	4	0	1	3	0	1	1	0	1
3890	2	0	0	2	0	1	1	0	0
3891	2	0	0	2	0	1	0	0	1
3892	9	0	0	9	0	2	5	0	2
3893	4	0	0	4	0	2	0	0	2
3894	4	0	0	4	0	2	1	0	1
3895	12	6	3	3	0	1	1	0	1
3896	5	0	0	5	0	1	2	0	2
3897	3	0	0	3	0	1	1	0	1
3898	4	0	1	3	0	2	1	0	0
3899	4	2	2	0	0	0	0	0	0
3900	8	0	0	8	0	2	2	0	4

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
3901	6	2	2	2	0	1	1	0	0
3902	8	5	1	2	0	0	1	0	1
3903	2	0	0	2	0	1	1	0	0
3904	0	0	0	0	0	0	0	0	0
3905	6	0	1	5	0	3	1	0	1
3906	6	6	0	0	0	0	0	0	0
3907	10	0	0	10	0	4	3	0	3
3908	0	0	0	0	0	0	0	0	0
3909	7	0	0	7	0	0	1	0	6
3910	8	0	1	7	0	2	4	0	1
3911	6	1	1	4	0	0	1	0	3
3912	7	0	0	7	0	3	1	0	3
3913	4	0	1	3	0	0	1	0	2
3914	3	0	0	3	0	1	2	0	0
3915	4	3	1	0	0	0	0	0	0
3916	13	6	3	4	0	1	2	0	1
3917	6	0	0	6	0	3	2	0	1
3918	6	0	0	6	0	3	3	0	0
3919	2	0	0	2	0	0	1	0	1
3920	7	0	0	7	0	2	4	0	1
3921	7	0	0	7	0	2	1	0	4
3922	2	1	0	1	0	0	1	0	0
3923	4	0	3	1	0	0	1	0	0
3924	6	0	0	6	0	1	2	0	3
3925	3	3	0	0	0	0	0	0	0
3926	3	0	0	3	0	0	1	0	2
3927	0	0	0	0	0	0	0	0	0
3928	7	0	0	7	0	3	3	0	1
3929	4	0	0	4	0	2	1	0	1
3930	3	0	0	3	0	1	0	0	2
3931	3	0	0	3	0	2	1	0	0
3932	8	2	1	5	0	1	3	0	1
3933	6	0	0	6	0	1	3	0	2
3934	4	0	0	4	0	2	2	0	0
3935	6	1	1	4	0	1	1	0	2
3936	6	0	0	6	0	3	1	0	2
3937	6	0	1	5	0	1	2	0	2
3938	7	0	0	7	0	3	3	0	1
3939	2	2	0	0	0	0	0	0	0
3940	3	0	0	3	0	2	1	0	0
3941	6	0	0	6	0	3	3	0	0
3942	5	0	0	5	0	1	2	0	2
3943	5	0	0	5	0	2	2	0	1
3944	4	0	0	4	0	0	2	0	2
3945	1	1	0	0	0	0	0	0	0
3946	6	0	0	6	0	2	1	0	3
3947	2	0	1	1	0	1	0	0	0
3948	9	0	0	9	0	5	2	0	2
3949	5	0	0	5	0	1	2	0	2
3950	1	0	0	1	0	0	1	0	0
3951	8	0	0	8	0	1	2	0	5
3952	10	0	0	10	0	2	6	0	2
3953	3	0	1	2	0	1	1	0	0
3954	0	0	0	0	0	0	0	0	0
3955	3	0	1	2	0	1	1	0	0
3956	4	0	0	4	0	1	1	0	2
3957	2	2	0	0	0	0	0	0	0
3958	10	0	0	10	0	3	3	0	4
3959	5	0	0	5	0	2	2	0	1
3960	6	0	0	6	0	1	3	0	2
3961	10	2	1	7	0	3	3	0	1
3962	2	0	0	2	0	0	1	0	1
3963	8	0	1	7	0	4	0	0	3
3964	3	0	0	3	0	1	2	0	0
3965	8	0	0	8	0	3	1	0	4
3966	3	0	1	2	0	0	2	0	0
3967	2	1	0	1	0	0	1	0	0
3968	5	0	0	5	0	1	3	0	1
3969	3	0	0	3	0	1	2	0	0
3970	9	2	0	7	0	2	2	0	3
3971	7	5	1	1	0	1	0	0	0
3972	8	0	0	8	0	2	4	0	2
3973	4	0	0	4	0	1	2	0	1
3974	6	0	1	5	0	1	2	0	2
3975	2	0	0	2	0	1	1	0	0
3976	10	8	2	0	0	0	0	0	0
3977	11	0	1	10	0	4	5	0	1
3978	5	3	0	2	0	1	1	0	0
3979	7	3	3	1	0	0	1	0	0
3980	2	0	0	2	0	0	1	0	1
3981	3	3	0	0	0	0	0	0	0
3982	4	0	1	3	0	1	2	0	0
3983	12	3	2	7	0	3	4	0	0
3984	7	0	0	7	0	2	2	0	3
3985	2	0	0	2	0	0	0	0	2
3986	3	0	0	3	0	0	1	0	2
3987	4	1	0	3	0	1	0	0	2
3988	0	0	0	0	0	0	0	0	0
3989	2	0	1	1	0	0	0	0	1
3990	4	0	0	4	0	2	2	0	0
3991	14	0	1	13	0	6	5	0	2
3992	2	0	0	2	0	1	1	0	0
3993	5	0	1	4	0	1	1	0	2
3994	7	3	0	4	0	0	3	0	1
3995	6	0	1	5	0	2	2	0	1
3996	6	0	2	4	0	1	1	0	2
3997	15	0	2	13	0	4	4	0	5
3998	13	0	1	12	0	3	5	0	4
3999	6	2	3	1	0	0	0	0	1
4000	5	0	1	4	0	0	2	0	2
4001	6	0	1	5	0	1	2	0	2
4002	6	1	0	5	0	2	0	0	3
4003	4	0	2	2	0	1	0	0	1
4004	2	0	0	2	0	0	1	0	1
4005	11	0	1	10	0	1	6	0	3
4006	7	2	1	4	0	2	1	0	1
4007	6	0	3	3	0	1	0	0	2
4008	3	0	0	3	0	0	2	0	1
4009	11	1	1	9	0	3	4	0	2
4010	6	0	0	6	0	2	1	0	3
4011	2	0	1	1	0	1	0	0	0
4012	0	0	0	0	0	0	0	0	0
4013	4	0	0	4	0	2	0	0	2
4014	9	2	1	6	0	2	1	0	3
4015	6	0	0	6	0	0	2	0	4
4016	2	0	0	2	0	1	0	0	1
4017	2	0	0	2	0	0	1	0	1
4018	9	0	0	9	0	3	2	0	4
4019	2	0	0	2	0	1	1	0	0
4020	5	0	0	5	0	1	1	0	3
4021	4	0	0	4	0	2	2	0	0
4022	5	0	0	5	0	1	3	0	1
4023	5	0	1	4	0	1	1	0	2
4024	10	0	1	9	0	3	5	0	1
4025	5	0	0	5	0	1	2	0	2
4026	6	0	0	6	0	2	4	0	0
4027	9	0	0	9	0	2	5	0	2
4028	8	0	0	8	C	3	4	0	1
4029	4	0	0	4	0	1	1	0	2
4030	2	0	0	2	0	1	1	0	0
4031	11	0	2	9	0	3	4	0	2
4032	5	0	0	5	0	1	2	0	2
4033	11	0	1	10	0	4	4	2	2
4034	0	0	0	0	0	0	0	0	0
4035	8	6	1	1	0	1	0	0	0
4036	11	0	1	10	0	2	6	0	2
4037	8	0	0	8	0	2	3	0	3
4038	7	0	0	7	0	3	0	1	4
4039	7	0	0	7	0	3	3	0	1
4040	6	0	0	6	0	1	3	0	2
4041	4	0	1	3	0	1	1	0	1
4042	7	0	0	7	0	2	3	0	2
4043	2	0	0	2	0	0	1	0	1
4044	2	0	0	2	0	1	1	0	0
4045	3	0	2	1	0	0	1	0	0
4046	4	0	0	4	0	1	0	0	3
4047	2	0	0	2	0	1	0	0	1
4048	7	0	0	7	0	2	2	0	3
4049	11	4	5	2	0	1	0	0	1
4050	2	0	0	2	0	1	1	0	0

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
4051	2	0	0	2	0	1	1	0	0
4052	0	0	0	0	0	0	0	0	0
4053	5	0	0	5	0	2	3	0	0
4054	4	0	1	3	0	1	0	0	2
4055	0	0	0	0	0	0	0	0	0
4056	6	0	1	5	0	3	2	0	0
4057	7	0	2	5	0	1	3	0	1
4058	2	0	0	2	0	0	0	0	2
4059	2	0	1	1	0	1	0	0	0
4060	6	4	1	1	0	0	1	0	0
4061	13	1	0	12	0	3	5	0	4
4062	7	0	0	7	0	1	3	0	3
4063	6	6	0	0	0	0	0	0	0
4064	4	0	0	4	0	1	2	0	1
4065	10	0	1	9	0	3	5	0	1
4066	8	0	1	7	0	2	3	0	2
4067	4	0	0	4	0	2	1	0	1
4068	7	1	2	4	0	0	3	0	1
4069	9	0	0	9	0	3	3	0	3
4070	6	0	0	6	0	1	2	0	3
4071	2	0	0	2	0	1	1	0	0
4072	6	0	0	6	0	2	1	0	3
4073	6	0	0	6	0	3	2	0	1
4074	4	0	0	4	0	1	0	0	3
4075	2	0	0	2	0	0	1	0	1
4076	3	0	0	3	0	1	1	0	1
4077	2	0	0	2	0	1	0	0	1
4078	4	0	0	4	0	2	2	0	0
4079	7	0	2	5	0	0	1	0	4
4080	8	0	0	8	0	3	3	0	2
4081	6	0	1	5	0	1	3	0	1
4082	10	0	0	10	0	5	3	0	2
4083	5	0	1	4	0	2	1	0	1
4084	3	0	0	3	0	1	1	0	1
4085	2	0	0	2	0	0	1	0	1
4086	9	7	0	2	0	0	1	0	1
4087	8	0	0	8	0	2	1	0	5
4088	7	0	1	6	0	1	3	0	2
4089	10	0	0	10	0	2	4	0	4
4090	2	0	0	2	0	1	0	0	1
4091	4	0	1	3	0	0	2	0	1
4092	11	0	0	11	0	4	4	0	3
4093	4	3	0	1	0	0	0	0	1
4094	1	0	1	0	0	0	0	0	0
4095	4	0	0	4	0	1	2	0	1
4096	2	0	0	2	0	1	0	0	1
4097	12	0	2	10	0	3	3	3	4
4098	4	0	0	4	0	0	0	0	4
4099	2	0	0	2	0	1	1	0	0
4100	5	0	0	5	0	1	2	0	2
4101	4	0	0	4	0	2	0	0	2
4102	6	0	3	3	0	1	1	0	1
4103	6	5	1	0	0	0	0	0	0
4104	2	0	0	2	0	1	0	0	1
4105	2	0	0	2	0	1	1	0	0
4106	3	0	0	3	0	1	2	0	0
4107	3	2	1	0	0	0	0	0	0
4108	4	0	0	4	0	1	2	0	1
4109	4	0	1	3	0	0	1	0	2
4110	4	2	1	1	0	0	0	0	1
4111	2	0	0	2	0	1	0	0	1
4112	5	4	1	0	0	0	0	0	0
4113	12	0	0	12	0	3	4	0	5
4114	2	0	0	2	0	1	1	0	0
4115	2	0	0	2	0	0	1	0	1
4116	0	0	0	0	0	0	0	0	0
4117	2	0	0	2	0	1	1	0	0
4118	4	0	1	3	0	2	0	0	1
4119	5	0	0	5	0	1	2	0	2
4120	4	0	0	4	0	1	2	0	1
4121	9	1	0	8	0	2	2	0	4
4122	2	0	0	2	0	0	1	0	1
4123	2	0	0	2	0	1	1	0	0
4124	5	1	1	3	0	2	1	0	0
4125	3	0	0	3	0	2	1	0	0
4126	4	0	0	4	0	1	2	0	1
4127	4	0	0	4	0	1	2	0	1
4128	4	0	0	4	0	2	2	0	0
4129	5	0	0	5	0	2	3	0	0
4130	4	0	0	4	0	1	1	0	2
4131	5	1	3	1	0	0	0	0	1
4132	3	2	1	0	0	0	0	0	0
4133	4	0	1	3	0	0	2	0	1
4134	9	0	1	8	0	3	4	0	1
4135	5	0	1	4	0	1	3	0	0
4136	6	0	2	4	0	1	2	0	1
4137	7	0	0	7	0	2	3	0	2
4138	6	0	0	6	0	2	3	0	1
4139	4	0	0	4	0	1	0	0	3
4140	4	4	0	0	0	0	0	0	0
4141	2	1	1	0	0	0	0	0	0
4142	0	0	0	0	0	0	0	0	0
4143	7	0	2	5	0	3	2	0	0
4144	4	2	0	2	0	1	1	0	0
4145	7	0	0	7	0	2	3	0	2
4146	7	1	0	6	0	1	4	0	1
4147	6	0	0	6	0	2	4	0	0
4148	9	0	0	9	0	3	4	0	2
4149	4	0	0	4	0	2	2	0	0
4150	4	0	0	4	0	1	2	0	1
4151	2	0	1	1	0	1	0	0	0
4152	2	2	0	0	0	0	0	0	0
4153	9	0	1	8	0	2	4	0	2
4154	3	0	0	3	0	1	1	0	1
4155	10	0	2	8	0	2	3	0	3
4156	0	0	0	0	0	0	0	0	0
4157	6	3	0	3	0	0	2	0	1
4158	4	0	0	4	0	1	1	0	2
4159	5	3	1	1	0	0	1	0	0
4160	2	0	1	1	0	1	0	0	0
4161	2	0	0	2	0	1	1	0	0
4162	2	2	0	0	0	0	0	0	0
4163	4	0	1	3	0	1	1	0	1
4164	10	0	2	8	0	3	1	0	4
4165	5	0	0	5	0	2	2	0	1
4166	2	0	1	1	0	0	1	0	0
4167	2	0	0	2	0	0	1	0	1
4168	5	0	0	5	0	2	3	0	0
4169	7	4	3	0	0	0	0	0	0
4170	4	0	2	2	0	0	1	0	1
4171	4	0	1	3	0	2	0	0	1
4172	4	0	2	2	0	0	0	0	2
4173	4	0	0	4	0	2	1	0	1
4174	2	0	0	2	0	1	0	0	1
4175	6	0	0	6	0	2	2	0	2
4176	6	2	1	3	0	1	1	1	1
4177	4	0	1	3	0	0	2	0	1
4178	8	0	1	7	0	3	3	0	1
4179	12	0	1	11	0	3	3	0	5
4180	3	0	0	3	0	0	2	0	1
4181	4	0	0	4	0	1	1	0	2
4182	4	0	1	3	0	2	0	0	1
4183	6	0	1	5	0	1	1	0	3
4184	4	0	1	3	0	1	0	0	2
4185	6	0	1	5	0	2	2	0	1
4186	8	5	0	3	0	2	0	0	1
4187	4	0	1	3	0	1	2	0	0
4188	10	0	1	9	0	4	3	0	2
4189	2	0	0	2	0	1	0	0	1
4190	5	0	0	5	0	1	1	0	3
4191	4	0	0	4	0	1	0	0	3
4192	7	6	0	1	0	1	0	0	0
4193	6	0	0	6	0	1	3	0	2
4194	3	2	1	0	0	0	0	0	0
4195	3	0	0	3	0	1	1	0	1
4196	2	0	1	1	0	0	0	0	1
4197	5	0	0	5	0	1	1	0	3
4198	4	0	0	4	0	2	1	0	1
4199	5	0	0	5	0	2	2	0	1
4200	2	0	0	2	0	1	0	0	1

IMPS Statistics Catalog

ID/1	P	S	R	M	F	D	N	G	X
4201	4	4	0	0	0	0	0	0	0
4202	2	0	0	2	0	1	1	0	0
4203	2	0	2	0	0	0	0	0	0
4204	2	0	0	2	0	1	1	0	0
4205	0	0	0	0	0	0	0	0	0
4206	2	0	0	2	0	1	0	0	1
4207	5	0	1	4	0	2	2	0	0
4208	3	0	0	3	0	0	1	0	2
4209	6	2	2	2	0	1	1	0	0
4210	10	0	0	10	0	4	2	0	4
4211	6	2	0	4	0	2	1	0	1
4212	6	0	0	6	0	3	2	0	1
4213	8	0	0	8	0	2	4	0	2
4214	3	0	0	3	0	2	1	0	0
4215	6	0	0	6	0	1	2	0	3
4216	2	0	0	2	0	0	1	0	1
4217	2	1	0	1	0	0	0	0	1
4218	2	0	0	2	0	0	1	0	1
4219	2	0	0	2	0	0	1	0	1
4220	5	0	1	4	0	2	1	0	1
4221	3	0	2	1	0	0	1	0	0
4222	6	5	1	0	0	0	0	0	0
4223	6	0	0	6	0	2	1	0	3
4224	12	9	2	1	0	1	0	0	0
4225	7	0	1	6	0	2	2	0	2
4226	4	4	0	0	0	0	0	0	0
4227	10	0	0	10	0	4	4	0	2
4228	2	0	0	2	0	1	0	0	1
4229	9	0	0	9	0	4	2	0	3
4230	2	2	0	0	0	0	0	0	0
4231	2	1	0	1	0	1	0	0	0
4232	11	0	1	10	0	3	3	0	4
4233	6	0	1	5	0	1	3	0	1
4234	0	0	0	0	0	0	0	0	0
4235	7	0	0	7	0	3	2	0	2
4236	2	2	0	0	0	0	0	0	0
4237	10	0	2	8	0	2	5	0	1
4238	5	0	1	4	0	1	0	0	3
4239	15	0	1	14	0	4	5	4	3
4240	4	0	0	4	0	1	2	0	1
4241	4	0	0	4	0	1	0	0	3
4242	5	0	0	5	0	1	3	0	1
4243	4	1	0	3	0	1	0	0	2
4244	4	0	0	4	0	1	2	0	1
4245	4	0	0	4	0	1	1	0	2
4246	2	0	0	2	0	0	0	0	2
4247	2	0	0	2	0	1	1	0	0
4248	4	0	0	4	0	2	1	0	1
4249	6	0	0	6	0	2	2	0	2
4250	7	1	1	5	0	2	1	0	2
4251	2	0	0	2	0	1	1	0	0
4252	5	0	0	5	0	2	2	0	1
4253	4	0	0	4	0	2	1	0	1
4254	6	0	0	6	0	3	2	0	1
4255	15	0	0	15	0	3	5	0	7
4256	2	0	0	2	0	1	1	0	0
4257	0	0	0	0	0	0	0	0	0
4258	2	0	0	2	0	1	1	0	0
4259	5	0	0	5	0	2	1	0	2
4260	2	0	0	2	0	1	1	0	0
4261	2	0	0	2	0	1	1	0	0
4262	13	0	2	11	0	3	3	0	5
4263	2	0	1	1	0	0	0	0	1
4264	7	0	0	7	0	2	2	0	3
4265	8	0	1	7	0	3	4	0	0
4266	6	1	0	5	0	1	1	0	3
4267	0	0	0	0	0	0	0	0	0
4268	6	0	0	6	0	3	3	0	0
4269	5	0	0	5	0	2	2	0	1
4270	2	0	0	2	0	0	1	0	1
4271	6	0	1	5	0	1	1	0	3
4272	2	0	1	1	0	0	1	0	0
4273	7	0	1	6	0	2	2	0	2
4274	6	0	0	6	0	1	2	0	3
4275	7	0	0	7	0	2	3	0	2
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4277	4	0	0	4	0	2	1	0	1
4278	0	0	0	0	0	0	0	0	0
4279	10	0	1	9	0	4	1	0	4
4280	6	0	1	5	0	2	2	0	1
4281	6	1	0	5	0	1	2	0	2
4282	5	0	1	4	0	1	3	0	0
4283	9	0	0	9	0	2	4	0	3
4284	8	0	1	7	0	1	2	0	4
4285	6	0	0	6	0	2	1	0	3
4286	3	0	0	3	0	0	2	0	1
4287	2	0	0	2	0	1	0	0	1
4288	5	0	0	5	0	1	1	0	3
4289	0	0	0	0	0	0	0	0	0
4290	8	0	2	6	0	1	1	0	4
4291	4	0	0	4	0	1	2	0	1
4292	6	2	1	3	0	0	2	0	1
4293	8	0	1	7	0	2	2	0	3
4294	7	0	0	7	0	2	3	0	2
4295	4	0	0	4	0	2	2	0	0
4296	0	0	0	0	0	0	0	0	0
4297	1	0	0	1	0	1	0	0	0
4298	11	1	4	6	0	1	1	0	4
4299	2	0	0	2	0	0	1	0	1
4300	9	0	0	9	0	4	3	0	2
4301	6	0	1	5	0	2	2	0	1
4302	7	0	0	7	0	3	2	0	2
4303	3	0	0	3	0	0	1	0	2
4304	4	0	0	4	0	2	2	0	0
4305	6	0	0	6	0	3	3	0	0
4306	13	0	0	13	0	4	5	0	4
4307	6	0	1	5	0	1	3	0	1
4308	3	0	1	2	0	0	1	0	1
4309	9	0	0	9	0	2	3	0	4
4310	7	0	1	6	0	2	3	0	1
4311	0	0	0	0	0	0	0	0	0
4312	8	0	1	7	0	2	4	0	1
4313	6	3	0	3	0	1	1	0	1
4314	15	0	2	13	0	7	3	6	3
4315	8	7	1	0	0	0	0	0	0
4316	6	0	0	6	0	1	4	0	1
4317	6	1	1	4	0	1	2	0	1
4318	4	0	0	4	0	1	1	0	2
4319	2	0	0	2	0	0	0	0	2
4320	3	0	0	3	0	2	1	0	0
4321	7	0	1	6	0	2	2	0	2
4322	2	0	0	2	0	0	0	0	2
4323	4	0	1	3	0	0	2	0	1
4324	5	0	0	5	0	2	1	0	2
4325	10	0	0	10	0	4	4	0	2
4326	5	0	0	5	0	1	3	0	1
4327	8	8	0	0	0	0	0	0	0
4328	2	0	0	2	0	1	1	0	0
4329	0	0	0	0	0	0	0	0	0
4330	2	0	0	2	0	1	0	0	1
4331	12	0	0	12	0	4	5	0	3
4332	6	2	0	4	0	2	2	0	0
4333	8	0	1	7	0	0	1	0	6
4334	4	0	1	3	0	0	2	0	1
4335	14	2	2	10	0	2	3	0	5
4336	7	0	0	7	0	0	3	0	4
4337	2	0	0	2	0	1	1	0	0
4338	2	0	0	2	0	1	1	0	0
4339	7	0	1	6	0	0	2	0	4
4340	7	0	1	6	0	1	3	0	2
4341	6	0	0	6	0	2	2	0	2
4342	7	3	2	2	0	1	0	0	1
4343	10	7	0	3	0	1	2	0	0
4344	0	0	0	0	0	0	0	0	0
4345	4	0	0	4	0	1	1	0	2
4346	5	0	0	5	0	1	1	0	3
4347	4	0	1	3	0	1	2	0	0
4348	4	0	0	4	0	1	2	0	1
4349	4	2	1	1	0	1	0	0	0
4350	6	1	0	5	0	2	1	0	2

ID/1	P	S	R	M	F	D	N	G	X
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4352	6	0	1	5	0	0	2	0	3
4353	7	0	0	7	0	2	4	0	1
4354	6	0	1	5	0	0	1	0	4
4355	0	0	0	0	0	0	0	0	0
4356	9	1	3	5	0	1	3	0	1
4357	2	0	1	1	0	0	0	0	1
4358	8	0	0	8	0	3	4	0	1
4359	3	0	0	3	0	1	1	0	1
4360	4	0	0	4	0	1	1	0	2
4361	3	0	0	3	0	1	2	0	0
4362	0	0	0	0	0	0	0	0	0
4363	8	0	2	6	0	1	3	0	2
4364	5	0	0	5	0	2	1	0	2
4365	3	0	0	3	0	1	2	0	0
4366	4	1	0	3	0	0	2	0	1
4367	6	0	2	4	0	0	0	0	4
4368	4	2	0	2	0	1	1	0	0
4369	3	0	0	3	0	1	2	0	0
4370	0	0	0	0	0	0	0	0	0
4371	9	0	1	8	0	3	2	0	3
4372	6	0	0	6	0	1	2	2	2
4373	2	0	0	2	0	0	0	0	2
4374	0	0	0	0	0	0	0	0	0
4375	4	0	0	4	0	1	2	0	1
4376	0	0	0	0	0	0	0	0	0
4377	4	0	0	4	0	1	1	0	2
4378	5	4	0	1	0	0	1	0	0
4379	7	6	1	0	0	0	0	0	0
4380	6	0	1	5	0	1	2	0	2
4381	6	3	0	3	0	1	2	0	0
4382	4	0	0	4	0	1	2	0	1
4383	6	0	0	6	0	3	2	0	1
4384	8	0	1	7	0	2	3	0	2
4385	9	0	1	8	0	3	1	0	4
4386	6	0	1	5	0	3	2	0	0
4387	4	0	0	4	0	1	1	0	2
4388	3	0	0	3	0	1	2	0	0
4389	6	0	1	5	0	2	2	0	1
4390	4	0	1	3	0	2	0	0	1
4391	5	0	0	5	0	2	2	0	1
4392	6	0	0	6	0	1	1	0	4
4393	6	0	0	6	0	1	0	0	5
4394	1	0	0	1	0	0	0	0	1
4395	4	0	1	3	0	2	1	0	0
4396	5	0	0	5	0	2	2	0	1
4397	1	0	0	1	0	0	0	0	1
4398	0	0	0	0	0	0	0	0	0
4399	7	0	1	6	0	3	3	0	0
4400	6	0	0	6	0	3	2	0	1
4401	7	0	0	7	0	3	3	0	1
4402	6	0	0	6	0	2	2	0	2
4403	0	0	0	0	0	0	0	0	0
4404	10	0	1	9	0	2	2	0	5
4405	2	0	0	2	0	1	1	0	0
4406	5	0	1	4	0	2	1	0	1
4407	10	0	0	10	0	2	2	0	6
4408	4	0	1	3	0	0	1	0	2
4409	4	0	0	4	0	2	2	0	0
4410	7	0	2	5	0	0	3	0	2
4411	0	0	0	0	0	0	0	0	0
4412	3	0	0	3	0	1	2	0	0
4413	0	0	0	0	0	0	0	0	0
4414	4	2	1	1	0	0	1	0	0
4415	4	0	1	3	0	1	2	0	0
4416	0	0	0	0	0	0	0	0	0
4417	3	0	0	3	0	1	0	0	2
4418	4	0	0	4	0	2	1	0	1
4419	7	0	1	6	0	2	2	0	2
4420	4	0	1	3	0	0	1	0	2
4421	7	0	0	7	0	0	2	0	5
4422	2	0	0	2	0	0	1	0	1
4423	2	0	0	2	0	1	1	0	0
4424	5	4	0	1	0	0	1	0	0
4425	7	0	0	7	0	2	2	0	3
4426	8	0	0	8	0	3	5	0	0
4427	3	0	0	3	0	0	0	0	3
4428	3	0	0	3	0	1	1	0	1
4429	6	0	0	6	0	2	0	0	4
4430	6	0	0	6	0	2	2	0	2
4431	8	7	1	0	0	0	0	0	0
4432	3	0	0	3	0	0	2	0	1
4433	4	0	0	4	0	0	1	0	3
4434	5	0	0	5	0	2	1	0	2
4435	6	0	1	5	0	3	1	0	1
4436	6	5	1	0	0	0	0	0	0
4437	7	0	1	6	0	2	1	0	3
4438	2	2	0	0	0	0	0	0	0
4439	6	0	0	6	0	2	4	0	0
4440	10	0	0	10	0	3	6	0	1
4441	6	0	0	6	0	1	1	0	4
4442	8	5	1	2	0	1	1	0	0
4443	4	0	0	4	0	2	0	0	2
4444	6	0	1	5	0	1	0	0	4
4445	5	0	0	5	0	2	3	0	0
4446	4	0	0	4	0	1	2	0	1
4447	6	0	0	6	0	3	2	0	1
4448	7	0	2	5	0	1	1	0	3
4449	4	3	0	1	0	0	0	0	1
4450	0	0	0	0	0	0	0	0	0
4451	5	0	0	5	0	3	2	0	0
4452	8	0	0	8	0	2	5	0	1
4453	2	0	0	2	0	0	1	0	1
4454	3	0	0	3	0	2	0	0	1
4455	2	0	1	1	0	0	1	0	0
4456	0	0	0	0	0	0	0	0	0
4457	7	0	3	4	0	1	1	0	2
4458	8	0	1	7	0	3	3	0	1
4459	8	0	0	8	0	2	5	0	1
4460	2	2	0	0	0	0	0	0	0
4461	2	0	1	1	0	0	0	0	1
4462	4	0	0	4	0	2	2	0	0
4463	2	0	0	2	0	0	1	0	1
4464	3	0	0	3	0	1	2	0	0
4465	17	0	0	17	0	6	9	0	2
4466	7	0	1	6	0	3	2	0	1
4467	9	0	1	8	[illegible]	4	2	0	2
4468	4	0	1	3	0	1	1	0	1
4469	2	0	0	2	0	0	0	0	2
4470	6	2	0	4	0	1	1	0	2
4471	5	0	1	4	0	1	3	0	0
4472	6	0	1	5	0	3	1	0	1
4473	4	0	0	4	0	1	1	0	2
4474	2	0	1	1	0	0	0	0	1
4475	0	0	0	0	0	0	0	0	0
4476	2	0	0	2	0	1	1	0	0
4477	5	0	0	5	0	1	2	0	2
4478	4	0	0	4	0	1	1	0	2
4479	7	0	0	7	0	2	4	0	1
4480	6	0	1	5	0	1	1	0	3
4481	4	0	0	4	0	0	1	0	3
4482	2	0	1	1	0	1	0	0	0
4483	11	0	1	10	0	4	4	0	2
4484	4	3	1	0	0	0	0	0	0
4485	2	0	1	1	0	0	1	0	0
4486	6	0	0	6	0	2	2	0	2
4487	0	0	0	0	0	0	0	0	0
4488	18	0	1	17	0	4	8	0	5
4489	8	7	1	0	0	0	0	0	0
4490	9	4	1	4	0	1	1	0	2
4491	11	0	2	9	0	3	2	0	4
4492	9	0	2	7	0	2	2	0	3
4493	6	3	2	1	0	0	1	0	0
4494	9	0	1	8	0	3	3	0	2
4495	5	0	0	5	0	2	3	0	0
4496	7	0	0	7	0	3	3	0	1
4497	12	0	0	12	0	5	4	0	3
4498	2	0	0	2	0	1	1	0	0
4499	6	0	0	6	0	3	3	0	0
4500	7	2	0	5	0	1	2	0	2

IMPS Statistics Catalog

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4502	3	0	0	3	0	1	2	0	0
4503	6	0	0	6	0	2	3	0	1
4504	8	0	0	8	0	2	3	0	3
4505	2	2	0	0	0	0	0	0	0
4506	2	0	0	2	0	1	1	0	0
4507	3	0	0	3	0	0	2	0	1
4508	5	0	0	5	0	1	2	0	2
4509	4	0	0	4	0	2	2	0	0
4510	8	0	1	7	0	3	3	0	1
4511	12	2	2	8	0	3	3	0	2
4512	4	0	0	4	0	2	1	0	1
4513	2	0	1	1	0	0	0	0	1
4514	9	0	1	8	0	3	3	0	2
4515	8	0	1	7	0	2	3	0	2
4516	2	0	0	2	0	1	0	0	1
4517	5	0	0	5	0	2	1	0	2
4518	7	0	0	7	0	2	2	0	3
4519	2	0	0	2	0	0	1	0	1
4520	4	0	0	4	0	1	1	0	2
4521	6	0	1	5	0	2	3	0	0
4522	3	3	0	0	0	0	0	0	0
4523	4	0	0	4	0	0	1	0	3
4524	7	0	0	7	0	2	4	0	1
4525	11	0	0	11	0	4	3	0	4
4526	4	0	1	3	0	1	1	0	1
4527	3	0	0	3	0	1	2	0	0
4528	5	0	0	5	0	1	2	0	2
4529	3	0	0	3	0	1	1	0	1
4530	5	0	2	3	0	1	2	0	0
4531	13	0	1	12	0	6	3	0	3
4532	3	0	1	2	0	0	2	0	0
4533	13	0	0	13	0	3	5	0	5
4534	2	0	1	1	0	1	0	0	0
4535	3	0	0	3	0	0	2	0	1
4536	0	0	0	0	0	0	0	0	0
4537	2	0	1	1	0	0	1	0	0
4538	6	0	2	4	0	2	2	0	0
4539	4	0	0	4	0	2	1	0	1
4540	6	1	0	5	0	2	3	0	0
4541	6	0	0	6	0	3	2	0	1
4542	8	0	2	6	0	3	3	0	0
4543	6	1	1	4	0	1	1	0	2
4544	0	0	0	0	0	0	0	0	0
4545	6	0	0	6	0	3	3	0	0
4546	6	0	0	6	0	3	0	0	3
4547	6	6	0	0	0	0	0	0	0
4548	8	0	0	8	0	3	3	0	2
4549	8	0	0	8	0	4	2	0	2
4550	7	0	0	7	0	2	2	3	2
4551	10	0	4	6	0	0	4	0	2
4552	6	0	0	6	0	2	0	0	4
4553	2	0	0	2	0	1	1	0	0
4554	5	3	1	1	0	0	1	0	0
4555	9	0	1	8	0	3	4	0	1
4556	7	0	0	7	0	3	3	0	1
4557	4	0	0	4	0	1	1	0	2
4558	7	0	0	7	0	2	1	0	4
4559	12	0	1	11	0	3	4	0	4
4560	4	0	0	4	0	0	0	0	4
4561	0	0	0	0	0	0	0	0	0
4562	7	3	0	4	0	0	1	0	3
4563	14	0	1	13	0	3	6	2	4
4564	2	0	0	2	0	1	1	0	0
4565	7	0	2	5	0	1	3	0	1
4566	4	0	0	4	0	2	1	0	1
4567	3	0	0	3	0	0	0	0	3
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4569	2	0	0	2	0	1	0	0	1
4570	3	0	1	2	0	0	2	0	0
4571	5	0	0	5	0	1	1	0	3
4572	2	0	0	2	0	1	0	0	1
4573	4	1	1	2	0	1	1	0	0
4574	0	0	0	0	0	0	0	0	0
4575	7	0	0	7	0	2	2	0	3
4576	7	0	1	6	0	3	2	0	1
4577	5	0	0	5	0	2	3	0	0
4578	3	0	0	3	0	2	1	0	0
4579	4	0	1	3	0	1	0	0	2
4580	3	0	0	3	0	1	2	0	0
4581	11	0	3	8	0	3	3	0	2
4582	3	0	0	3	0	2	1	0	0
4583	2	0	0	2	0	0	0	0	2
4584	5	0	1	4	0	1	2	0	1
4585	2	0	0	2	0	0	1	0	1
4586	4	0	0	4	0	1	2	0	1
4587	2	0	0	2	0	1	1	0	0
4588	8	0	0	8	0	2	5	0	1
4589	2	0	1	1	0	0	0	0	1
4590	6	0	0	6	0	3	1	0	2
4591	2	0	0	2	0	0	1	0	1
4592	11	0	0	11	0	2	2	0	7
4593	4	0	2	2	0	2	0	0	0
4594	8	0	0	8	0	3	3	0	2
4595	6	0	1	5	0	0	2	0	3
4596	7	0	0	7	0	2	3	0	2
4597	6	1	0	5	0	2	1	0	2
4598	4	0	0	4	0	2	2	0	0
4599	6	0	0	6	0	3	2	0	1
4600	0	0	0	0	0	0	0	0	0
4601	5	0	0	5	0	0	2	0	3
4602	0	0	0	0	0	0	0	0	0
4603	2	0	0	2	0	0	1	0	1
4604	7	0	2	5	0	1	2	0	2
4605	10	0	0	10	0	4	2	1	3
4606	5	0	0	5	0	2	2	0	1
4607	2	0	0	2	0	0	1	0	1
4608	4	0	0	4	0	2	1	0	1
4609	6	2	1	3	0	2	1	0	0
4610	4	0	0	4	0	1	0	0	3
4611	0	0	0	0	0	0	0	0	0
4612	2	0	0	2	0	1	1	0	0
4613	7	0	1	6	0	1	3	0	2
4614	10	0	1	9	0	1	5	0	3
4615	2	0	0	2	0	1	1	0	0
4616	6	0	0	6	0	1	2	2	1
4617	9	3	0	6	0	0	3	0	3
4618	4	0	0	4	0	1	2	0	1
4619	5	0	0	5	0	1	2	0	2
4620	5	0	0	5	0	2	0	0	3
4621	6	0	1	5	0	3	2	0	0
4622	10	0	0	10	0	2	4	0	4
4623	6	0	0	6	0	2	2	0	2
4624	18	0	1	17	0	6	9	0	2
4625	0	0	0	0	0	0	0	0	0
4626	9	0	1	8	0	1	1	0	6
4627	5	0	1	4	0	1	2	0	1
4628	0	0	0	0	0	0	0	0	0
4629	7	0	1	6	0	1	4	0	1
4630	2	0	0	2	0	0	0	0	2
4631	7	0	0	7	0	3	3	0	1
4632	7	0	2	5	0	1	2	2	0
4633	8	0	2	6	0	3	3	0	0
4634	2	0	1	1	0	0	0	0	1
4635	3	0	0	3	0	1	1	0	1
4636	9	0	0	9	0	3	2	0	4
4637	6	0	0	6	0	2	2	0	2
4638	9	0	1	8	0	2	4	3	2
4639	2	0	0	2	0	0	0	0	2
4640	7	0	1	6	0	0	2	0	4
4641	12	0	1	11	0	3	5	1	2
4642	8	1	0	7	0	2	1	0	4
4643	7	0	0	7	0	2	3	0	2
4644	2	0	0	2	0	1	0	0	1
4645	7	2	1	4	0	1	2	0	1
4646	7	0	1	6	0	3	2	0	1
4647	5	0	0	5	0	2	2	0	1
4648	7	3	2	2	0	0	1	0	1
4649	7	0	0	7	0	2	2	0	3
4650	10	0	3	7	0	1	1	0	5

ID/1	P	S	R	M	F	D	N	G	X
4651	4	0	0	4	0	2	2	0	0
4652	11	0	0	11	0	2	6	0	3
4653	3	0	0	3	0	0	1	0	2
4654	13	0	0	13	0	4	9	0	0
4655	6	0	0	6	0	2	3	0	1
4656	2	0	0	2	0	0	0	0	2
4657	15	0	1	14	0	4	4	0	6
4658	8	0	0	8	0	4	4	0	0
4659	2	0	1	1	0	0	1	0	0
4660	0	0	0	0	0	0	0	0	0
4661	0	0	0	0	0	0	0	0	0
4662	4	0	1	3	0	1	1	0	1
4663	8	5	1	2	0	0	1	0	1
4664	4	0	0	4	0	1	1	0	2
4665	4	0	0	4	0	1	0	0	3
4666	7	0	0	7	0	1	2	0	4
4667	4	0	0	4	0	2	1	0	1
4668	9	0	1	8	0	3	2	0	3
4669	8	0	1	7	0	3	2	0	2
4670	6	0	0	6	0	2	4	0	0
4671	2	0	1	1	0	0	1	0	0
4672	7	4	2	1	0	0	1	0	0
4673	6	0	0	6	0	1	3	0	2
4674	0	0	0	0	0	0	0	0	0
4675	5	0	0	5	0	0	2	0	3
4676	6	0	0	6	0	1	3	0	2
4677	9	0	0	9	0	3	4	7	0
4678	11	0	0	11	0	4	4	0	3
4679	9	0	0	9	0	3	3	0	3

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
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2	2	0	0	2	0	1	0	0	1
3	14	0	2	12	0	3	6	0	3
4	3	0	0	3	0	1	2	0	0
5	8	0	0	8	0	2	2	0	4
6	10	0	0	10	0	3	5	0	2
7	10	0	1	9	0	2	2	0	5
8	14	0	1	13	0	4	6	0	3
9	4	0	0	4	0	2	1	0	1
10	5	0	1	4	0	2	2	0	0
11	7	0	0	7	0	3	4	0	0
12	2	0	0	2	0	1	1	0	0
13	6	0	0	6	0	2	1	0	3
14	2	0	0	2	0	0	0	0	2
15	6	0	0	6	0	2	1	0	3
16	6	0	1	5	0	0	2	0	3
17	6	0	0	6	0	2	2	0	2
18	6	0	1	5	0	2	0	0	3
19	4	0	0	4	0	1	2	0	1
20	5	0	0	5	0	2	1	0	2
21	0	0	0	0	0	0	0	0	0
22	4	0	0	4	0	2	0	0	2
23	4	0	0	4	0	2	1	0	1
24	3	0	0	3	0	1	1	0	1
25	8	0	0	8	0	3	3	0	2
26	5	0	0	5	0	2	2	0	1
27	4	0	0	4	0	1	2	0	1
28	7	0	0	7	0	3	2	0	2
29	4	0	1	3	0	1	0	0	2
30	5	0	0	5	0	2	3	0	0
31	7	4	1	2	0	1	0	0	1
32	0	0	0	0	0	0	0	0	0
33	7	0	1	6	0	2	3	0	1
34	3	0	0	3	0	1	1	0	1
35	9	0	1	8	0	2	2	0	4
36	5	0	0	5	0	2	2	0	1
37	10	0	0	10	0	3	2	0	5
38	8	0	0	8	0	3	1	0	4
39	5	0	0	5	0	2	2	0	1
40	3	0	1	2	0	0	1	0	1
41	2	0	0	2	0	1	1	0	0
42	2	0	0	2	0	1	1	0	0
43	10	0	0	10	0	4	3	0	3
44	2	0	2	0	0	0	0	0	0
45	4	0	0	4	0	2	2	0	0
46	4	0	0	4	0	2	1	0	1
47	7	0	0	7	0	2	1	0	4
48	6	0	1	5	0	2	1	0	2
49	7	0	1	6	0	2	3	0	1
50	5	0	1	4	0	1	1	0	2
51	9	1	3	5	0	2	2	0	1
52	7	0	0	7	0	3	2	0	2
53	2	0	1	1	0	0	1	0	0
54	3	0	0	3	0	1	1	0	1
55	4	0	0	4	0	2	1	0	1
56	2	0	1	1	0	0	1	0	0
57	7	0	0	7	0	1	3	0	3
58	7	0	0	7	0	1	2	0	4
59	6	0	0	6	0	2	3	0	1
60	4	0	0	4	0	1	0	0	3
61	2	0	1	1	0	1	0	0	0
62	9	0	1	8	0	4	2	0	2
63	6	0	0	6	0	3	3	0	0
64	2	0	0	2	0	1	0	0	1
65	2	0	0	2	0	1	1	0	0
66	2	0	0	2	0	1	1	0	0
67	4	0	0	4	0	2	2	0	0
68	2	0	0	2	0	1	0	0	1
69	4	0	0	4	0	2	1	0	1
70	6	0	1	5	0	2	1	0	2
71	4	0	0	4	0	1	2	0	1
72	10	0	0	10	0	3	4	0	3
73	8	0	1	7	0	1	3	0	3
74	2	0	0	2	0	0	1	0	1
75	3	0	0	3	0	0	2	0	1
76	2	0	0	2	0	1	1	0	0
77	4	0	0	4	0	0	1	0	3
78	7	0	0	7	0	2	2	0	3
79	1	0	0	1	0	1	0	0	0
80	2	0	0	2	0	0	1	0	1
81	4	0	0	4	0	0	1	0	3
82	4	0	0	4	0	0	1	0	3
83	2	0	0	2	0	0	0	0	2
84	11	0	0	11	0	3	4	0	4
85	8	0	1	7	0	1	3	0	3
86	10	0	1	9	0	3	3	0	3
87	12	0	1	11	0	3	4	3	4
88	6	0	0	6	0	0	3	3	1
89	4	0	0	4	0	0	1	0	3
90	0	0	0	0	0	0	0	0	0
91	7	0	0	7	0	2	1	0	4
92	7	0	0	7	0	3	3	2	0
93	5	0	0	5	0	1	2	0	2
94	11	0	1	10	0	4	5	0	1
95	3	0	0	3	0	1	1	0	1
96	2	0	0	2	0	1	0	0	1
97	5	0	0	5	0	3	1	0	1
98	12	0	1	11	0	5	5	0	1
99	4	0	0	4	0	1	2	0	1
100	2	0	0	2	0	1	0	0	1
101	2	0	0	2	0	0	1	0	1
102	6	0	0	6	0	1	2	0	3
103	2	0	0	2	0	0	1	0	1
104	0	0	0	0	0	0	0	0	0
105	3	0	0	3	0	1	2	0	0
106	3	0	0	3	0	1	2	0	0
107	5	0	0	5	0	2	2	0	1
108	6	0	0	6	0	2	2	0	2
109	2	0	0	2	0	0	1	0	1
110	10	0	0	10	0	3	5	0	2
111	3	0	0	3	0	1	2	0	0
112	6	0	0	6	0	2	2	0	2
113	5	0	0	5	0	0	3	0	2
114	9	4	3	2	0	0	2	0	0
115	10	0	1	9	0	3	3	0	3
116	8	0	0	8	0	3	3	6	1
117	11	0	1	10	0	4	4	0	2
118	5	0	0	5	0	2	2	0	1
119	9	0	1	8	0	3	4	0	1
120	4	0	0	4	0	2	1	0	1
121	0	0	0	0	0	0	0	0	0
122	7	0	0	7	0	3	4	0	0
123	3	0	0	3	0	1	2	0	0
124	6	0	0	6	0	3	3	0	0
125	6	0	0	6	0	2	3	0	1
126	3	0	0	3	0	0	1	0	2
127	9	0	1	8	0	2	2	0	4
128	8	0	1	7	0	2	5	0	0
129	2	0	0	2	0	1	1	0	0
130	8	0	0	8	0	2	2	0	4
131	6	0	1	5	0	1	3	0	1
132	2	0	0	2	0	1	0	0	1
133	2	0	0	2	0	1	0	0	1
134	6	0	0	6	0	2	3	0	1
135	8	0	0	8	0	2	4	0	2
136	6	0	1	5	0	1	1	0	3
137	5	0	1	4	0	1	1	0	2
138	6	0	0	6	0	2	3	0	1
139	3	0	0	3	0	1	1	0	1
140	4	0	0	4	0	1	0	0	3
141	9	0	1	8	0	2	3	0	3
142	11	0	0	11	0	3	5	0	3
143	8	0	1	7	0	3	2	0	2
144	6	0	0	6	0	3	2	0	1
145	2	0	0	2	0	1	1	0	0
146	13	0	1	12	0	3	5	0	4
147	4	0	1	3	0	2	1	0	0
148	4	0	0	4	0	0	2	0	2
149	9	0	0	9	0	3	5	0	1
150	9	0	0	9	0	2	4	0	3

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
151	4	0	0	4	0	1	2	0	1
152	5	0	0	5	0	1	1	0	3
153	6	0	0	6	0	3	3	0	0
154	6	0	0	6	0	2	0	0	4
155	10	0	1	9	0	1	6	0	2
156	4	0	0	4	0	0	1	0	3
157	4	0	0	4	0	2	2	0	0
158	3	1	1	1	0	0	1	0	0
159	7	0	0	7	0	2	3	0	2
160	6	0	0	6	0	1	1	0	4
161	3	0	0	3	0	1	1	0	1
162	6	0	0	6	0	2	2	0	2
163	7	0	0	7	0	2	3	0	2
164	4	0	0	4	0	1	2	0	1
165	4	0	0	4	0	1	1	0	2
166	7	0	1	6	0	2	3	0	1
167	0	0	0	0	0	0	0	0	0
168	5	0	4	1	0	0	1	0	0
169	6	0	0	6	0	3	2	0	1
170	6	0	0	6	0	1	2	0	3
171	6	0	0	6	0	2	2	0	2
172	0	0	0	0	0	0	0	0	0
173	4	0	0	4	0	1	1	0	2
174	4	0	0	4	0	1	1	0	2
175	5	3	2	0	0	0	0	0	0
176	10	0	0	10	0	5	3	0	2
177	2	0	0	2	0	1	0	0	1
178	14	0	1	13	0	4	4	0	5
179	9	0	0	9	0	2	3	6	2
180	7	0	0	7	0	2	2	0	3
181	4	0	0	4	0	2	0	0	2
182	6	0	1	5	0	2	1	0	2
183	5	0	0	5	0	2	1	0	2
184	11	0	1	10	0	3	2	0	5
185	8	0	0	8	0	4	3	0	1
186	8	0	3	5	0	2	3	0	0
187	7	0	0	7	0	2	3	0	2
188	6	0	0	6	0	2	3	0	1
189	4	0	0	4	0	1	2	0	1
190	2	0	0	2	0	1	1	0	0
191	6	0	0	6	0	2	2	0	2
192	2	0	0	2	0	1	1	0	0
193	4	0	0	4	0	2	2	0	0
194	0	0	0	0	0	0	0	0	0
195	5	0	0	5	0	2	2	0	1
196	4	0	0	4	0	2	2	0	0
197	4	0	0	4	0	1	1	0	2
198	5	0	0	5	0	1	2	0	2
199	7	0	1	6	0	2	2	0	2
200	0	0	0	0	0	0	0	0	0
201	2	0	0	2	0	0	0	0	2
202	0	0	0	0	0	0	0	0	0
203	0	0	0	0	0	0	0	0	0
204	2	0	0	2	0	1	0	0	1
205	13	0	0	13	0	2	7	0	4
206	19	0	1	18	0	7	8	0	3
207	7	0	0	7	0	3	2	0	2
208	6	0	0	6	0	3	2	0	1
209	10	0	0	10	0	3	4	0	3
210	0	0	0	0	0	0	0	0	0
211	2	0	0	2	0	0	1	0	1
212	6	0	1	5	0	2	3	0	0
213	1	0	0	1	0	0	0	0	1
214	1	0	0	1	0	0	1	0	0
215	6	0	0	6	0	2	2	0	2
216	9	0	0	9	0	2	3	0	4
217	3	0	0	3	0	1	1	0	1
218	2	0	0	2	0	0	1	0	1
219	7	1	0	6	0	2	2	0	2
220	6	0	1	5	0	2	2	0	1
221	2	0	2	0	0	0	0	0	0
222	4	0	0	4	0	1	2	0	1
223	8	0	0	8	0	3	2	0	3
224	2	0	0	2	0	0	0	0	2
225	3	0	0	3	0	0	1	0	2
226	11	0	3	8	0	2	3	0	3
227	3	0	0	3	0	1	2	0	0
228	1	0	0	1	0	0	1	0	0
229	2	0	0	2	0	0	0	0	2
230	9	0	0	9	0	2	3	0	4
231	5	0	1	4	0	0	3	0	1
232	3	0	0	3	0	1	1	0	1
233	6	0	0	6	0	2	1	0	3
234	8	0	0	8	0	2	4	0	2
235	13	0	2	11	0	2	7	0	2
236	6	0	0	6	0	2	2	0	2
237	4	2	0	2	0	1	0	0	1
238	10	0	2	8	0	2	2	0	4
239	5	0	1	4	0	1	3	0	0
240	6	0	0	6	0	2	3	0	1
241	10	0	0	10	0	3	4	4	3
242	8	0	0	8	0	3	5	0	0
243	6	0	0	6	0	1	4	0	1
244	11	0	0	11	0	4	5	0	2
245	6	0	2	4	0	2	1	0	1
246	4	0	0	4	0	2	1	0	1
247	2	2	0	0	0	0	0	0	0
248	4	0	0	4	0	1	2	0	1
249	4	0	1	3	0	0	2	0	1
250	6	0	1	5	0	1	1	2	3
251	8	0	1	7	0	2	4	0	1
252	5	0	0	5	0	1	2	0	2
253	0	0	0	0	0	0	0	0	0
254	7	0	0	7	0	3	4	0	0
255	7	0	0	7	0	1	3	0	3
256	0	0	0	0	0	0	0	0	0
257	12	0	1	11	0	2	5	0	4
258	4	0	0	4	0	2	1	0	1
259	2	0	0	2	0	0	1	0	1
260	10	0	0	10	0	3	5	0	2
261	0	0	0	0	0	0	0	0	0
262	15	0	2	13	0	4	4	0	5
263	10	1	1	8	0	2	5	0	1
264	5	0	0	5	0	1	1	0	3
265	6	0	0	6	0	3	3	0	0
266	6	0	0	6	0	1	2	0	3
267	3	0	0	3	0	1	2	0	0
268	4	2	0	2	0	0	1	0	1
269	6	0	0	6	0	3	2	0	1
270	4	0	0	4	0	2	2	0	0
271	4	0	0	4	0	1	2	0	1
272	6	0	0	6	0	2	3	0	1
273	5	0	0	5	0	2	2	0	1
274	7	0	0	7	0	1	3	0	3
275	8	0	0	8	0	0	3	0	5
276	2	0	0	2	0	1	1	0	0
277	2	0	0	2	0	1	1	0	0
278	6	0	0	6	0	2	3	0	1
279	3	0	0	3	0	0	1	0	2
280	5	0	0	5	0	2	2	0	1
281	8	0	0	8	0	4	3	0	1
282	5	0	0	5	0	2	0	0	3
283	3	0	1	2	0	0	0	0	2
284	4	0	0	4	0	1	1	0	2
285	7	0	0	7	0	4	2	0	1
286	5	0	0	5	0	1	2	0	2
287	2	1	0	1	0	0	0	0	1
288	2	0	0	2	0	1	1	0	0
289	9	0	0	9	0	3	3	0	3
290	7	0	1	6	0	2	2	3	2
291	7	0	0	7	0	3	3	0	1
292	3	2	0	1	0	0	1	0	0
293	4	0	1	3	0	1	1	0	1
294	8	0	0	8	0	3	2	0	3
295	7	0	0	7	0	2	1	0	4
296	7	0	0	7	0	2	3	0	2
297	5	0	0	5	0	2	1	0	2
298	4	0	0	4	0	1	1	0	2
299	9	0	2	7	0	2	4	7	0
300	5	2	1	2	0	0	1	0	1

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
301	10	0	1	9	0	3	4	0	2
302	2	0	0	2	0	0	1	0	1
303	7	0	0	7	0	2	3	0	2
304	6	0	1	5	0	1	4	0	0
305	11	0	0	11	0	4	6	0	1
306	8	0	0	8	0	0	1	0	7
307	5	0	0	5	0	1	1	0	3
308	0	0	0	0	0	0	0	0	0
309	8	0	1	7	0	1	4	0	2
310	3	0	0	3	0	1	0	0	2
311	1	0	0	1	0	1	0	0	0
312	2	0	0	2	0	1	1	0	0
313	5	0	0	5	0	1	1	0	3
314	3	0	0	3	0	1	2	0	0
315	4	0	0	4	0	0	2	0	2
316	7	0	0	7	0	2	0	0	5
317	6	0	0	6	0	3	2	0	1
318	2	0	0	2	0	1	0	0	1
319	8	0	3	5	0	1	2	0	2
320	2	0	1	1	0	0	0	0	1
321	9	0	1	8	0	3	4	8	0
322	4	0	1	3	0	2	1	0	0
323	7	0	0	7	0	1	3	2	2
324	4	0	0	4	0	1	1	0	2
325	4	0	0	4	0	1	0	0	3
326	9	0	1	8	0	2	2	0	4
327	9	0	0	9	0	2	3	0	4
328	5	0	0	5	0	1	0	0	4
329	6	0	1	5	0	1	2	0	2
330	0	0	0	0	0	0	0	0	0
331	2	0	0	2	0	0	1	0	1
332	4	0	0	4	0	1	1	0	2
333	5	0	0	5	0	2	2	0	1
334	2	0	1	1	0	0	1	0	0
335	2	0	1	1	0	1	0	0	0
336	2	0	0	2	0	1	1	0	0
337	7	0	1	6	0	1	2	0	3
338	7	5	0	2	0	1	1	0	0
339	0	0	0	0	0	0	0	0	0
340	2	0	0	2	0	1	1	0	0
341	6	0	1	5	0	1	0	0	4
342	7	1	1	5	0	0	3	0	2
343	9	0	0	9	0	1	4	0	4
344	2	0	0	2	0	0	1	0	1
345	2	0	0	2	0	1	1	0	0
346	2	0	0	2	0	1	1	0	0
347	7	0	1	6	0	2	3	0	1
348	4	0	0	4	0	2	1	0	1
349	12	0	2	10	0	3	4	0	3
350	6	0	0	6	0	1	3	0	2
351	5	0	2	3	0	1	1	0	1
352	8	0	0	8	0	2	5	0	1
353	7	0	1	6	0	1	3	0	2
354	9	0	2	7	0	3	1	0	3
355	4	0	0	4	0	1	1	0	2
356	7	0	0	7	0	4	1	0	2
357	4	0	0	4	0	1	0	0	3
358	7	0	1	6	0	2	2	0	2
359	4	0	1	3	0	0	0	0	3
360	7	0	0	7	0	2	3	0	2
361	1	0	0	1	0	0	1	0	0
362	4	1	0	3	0	1	1	0	1
363	6	0	0	6	0	2	2	0	2
364	4	0	0	4	0	2	2	0	0
365	2	0	0	2	0	1	1	0	0
366	5	0	1	4	0	2	1	0	1
367	0	0	0	0	0	0	0	0	0
368	0	0	0	0	0	0	0	0	0
369	1	0	0	1	0	1	0	0	0
370	11	0	1	10	0	3	6	0	1
371	4	0	1	3	0	0	1	0	2
372	7	0	0	7	0	2	2	0	3
373	4	0	3	1	0	0	0	0	1
374	5	0	0	5	0	2	1	0	2
375	5	0	0	5	0	1	2	0	2
376	5	0	0	5	0	2	2	0	1
377	2	0	0	2	0	0	1	0	1
378	4	0	0	4	0	1	2	0	1
379	3	0	0	3	0	2	1	0	0
380	0	0	0	0	0	0	0	0	0
381	2	0	0	2	0	1	0	0	1
382	8	0	0	8	0	3	4	0	1
383	2	0	0	2	0	1	0	0	1
384	6	0	1	5	0	0	2	0	3
385	4	0	0	4	0	2	1	0	1
386	11	0	1	10	0	2	3	0	5
387	4	0	0	4	0	2	1	0	1
388	5	2	1	2	0	0	1	0	1
389	5	0	0	5	0	2	3	0	0
390	7	0	0	7	0	3	4	0	0
391	7	0	0	7	0	4	2	0	1
392	2	0	0	2	0	1	0	0	1
393	4	0	0	4	0	1	1	0	2
394	4	0	0	4	0	1	0	0	3
395	5	0	0	5	0	2	3	0	0
396	8	0	2	6	0	3	1	0	2
397	5	0	1	4	0	1	1	0	2
398	6	0	0	6	0	2	1	0	3
399	5	0	0	5	0	1	2	0	2
400	8	0	1	7	0	2	4	0	1
401	3	0	0	3	0	1	2	0	0
402	6	6	0	0	0	0	0	0	0
403	8	0	0	8	0	3	3	0	2
404	11	0	2	9	0	4	3	0	2
405	3	0	0	3	0	2	1	0	0
406	6	0	0	6	0	2	1	0	3
407	5	0	0	5	0	2	1	0	2
408	9	0	1	8	0	4	1	0	3
409	5	1	0	4	0	2	1	0	1
410	4	0	0	4	0	1	1	0	2
411	5	0	0	5	0	2	1	0	2
412	10	0	0	10	0	5	3	0	2
413	13	0	0	13	0	1	1	0	11
414	8	0	1	7	0	1	2	0	4
415	7	0	0	7	0	2	2	0	3
416	9	0	0	9	0	1	3	0	5
417	3	0	0	3	0	2	0	0	1
418	5	0	0	5	0	2	1	0	2
419	8	0	1	7	0	2	1	0	4
420	5	0	1	4	0	0	2	0	2
421	9	0	0	9	0	3	3	0	3
422	8	0	0	8	0	3	3	0	2
423	4	0	0	4	0	2	2	0	0
424	4	0	0	4	0	1	1	0	2
425	6	0	0	6	0	1	1	0	4
426	8	0	0	8	0	3	4	0	1
427	9	0	0	9	0	3	3	0	3
428	4	0	0	4	0	2	2	0	0
429	2	0	0	2	0	1	1	0	0
430	4	0	0	4	0	2	1	0	1
431	7	0	0	7	0	3	4	0	0
432	10	0	2	8	0	2	2	0	4
433	4	0	0	4	0	2	2	0	0
434	6	0	0	6	0	2	1	0	3
435	4	0	0	4	0	2	2	0	0
436	7	0	0	7	0	3	3	0	1
437	4	0	0	4	0	2	1	0	1
438	2	0	0	2	0	1	1	0	0
439	0	0	0	0	0	0	0	0	0
440	9	0	0	9	0	3	4	0	2
441	3	0	0	3	0	1	1	0	1
442	2	0	1	1	0	0	1	0	0
443	13	3	0	10	0	1	6	0	3
444	2	0	0	2	0	1	0	0	1
445	7	0	1	6	0	2	2	0	2
446	7	0	0	7	0	3	3	0	1
447	8	0	0	8	0	3	4	0	1
448	12	0	1	11	0	4	5	0	2
449	8	0	0	8	0	3	2	0	3
450	7	0	0	7	0	3	3	0	1

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
451	4	0	0	4	0	1	2	0	1
452	2	0	0	2	0	1	1	0	0
453	2	0	0	2	0	1	1	0	0
454	6	0	1	5	0	2	2	0	1
455	3	0	0	3	0	1	2	0	0
456	3	0	0	3	0	1	1	0	1
457	4	0	0	4	0	0	2	0	2
458	10	0	0	10	0	5	4	0	1
459	2	0	0	2	0	1	0	0	1
460	3	0	0	3	0	1	2	0	0
461	6	0	0	6	0	3	2	0	1
462	3	0	0	3	0	1	2	0	0
463	12	0	0	12	0	3	4	0	5
464	6	0	0	6	0	2	3	0	1
465	7	0	1	6	0	2	3	0	1
466	10	5	3	2	0	0	1	0	1
467	3	0	0	3	0	1	1	0	1
468	6	0	0	6	0	2	2	0	2
469	2	0	0	2	0	1	1	0	0
470	3	0	0	3	0	1	1	0	1
471	8	0	1	7	0	3	1	0	3
472	6	0	2	4	0	2	2	0	0
473	2	0	0	2	0	1	1	0	0
474	8	0	1	7	0	1	1	0	5
475	8	0	0	8	0	3	2	0	3
476	3	0	1	2	0	1	1	0	0
477	1	0	0	1	0	1	0	0	0
478	4	0	0	4	0	2	2	0	0
479	13	8	2	3	0	0	2	0	1
480	11	0	3	8	8	2	4	5	0
481	5	0	1	4	0	1	2	0	1
482	2	0	0	2	0	1	0	0	1
483	2	0	0	2	0	0	1	0	1
484	2	0	0	2	0	1	1	0	0
485	4	0	0	4	0	0	0	0	4
486	2	0	0	2	0	1	1	0	0
487	7	0	1	6	0	2	2	0	2
488	5	0	0	5	0	3	1	0	1
489	3	0	2	1	0	0	0	0	1
490	3	2	1	0	0	0	0	0	0
491	7	0	2	5	0	1	2	0	2
492	2	0	0	2	0	0	1	0	1
493	7	2	0	5	0	2	3	0	0
494	4	0	0	4	0	1	1	0	2
495	5	0	0	5	0	2	1	0	2
496	1	0	0	1	0	0	0	0	1
497	6	0	0	6	0	3	1	0	2
498	5	0	0	5	0	2	3	0	0
499	5	0	0	5	0	1	3	0	1
500	3	0	0	3	0	0	2	0	1
501	3	0	0	3	0	1	1	0	1
502	6	0	0	6	0	0	1	0	5
503	2	0	0	2	0	1	1	0	0
504	4	0	0	4	0	1	2	0	1
505	6	0	0	6	0	0	2	0	4
506	10	0	1	9	0	2	4	0	3
507	4	0	1	3	0	2	0	0	1
508	10	0	0	10	0	5	2	0	3
509	9	0	0	9	0	3	5	0	1
510	9	0	0	9	0	4	2	2	3
511	2	0	0	2	0	0	0	0	2
512	4	0	1	3	0	1	0	0	2
513	11	7	3	1	0	0	1	0	0
514	6	0	0	6	0	2	3	0	1
515	6	0	0	6	0	2	2	0	2
516	8	1	0	7	0	2	3	0	2
517	7	0	0	7	0	2	2	0	3
518	6	0	0	6	0	1	3	0	2
519	4	0	0	4	0	2	1	0	1
520	7	0	0	7	0	3	3	0	1
521	7	0	2	5	0	1	1	0	3
522	9	0	0	9	0	1	4	0	4
523	13	0	1	12	0	4	3	0	5
524	9	0	0	9	0	4	5	0	0
525	6	0	0	6	0	1	0	0	5
526	5	0	0	5	0	1	1	0	3
527	5	0	0	5	0	2	1	0	2
528	8	0	0	8	0	3	3	0	2
529	4	0	0	4	0	1	0	0	3
530	4	0	0	4	0	1	1	0	2
531	4	0	0	4	0	1	1	0	2
532	5	0	0	5	0	3	1	0	1
533	7	0	0	7	0	3	3	0	1
534	6	0	0	6	0	1	2	0	3
535	7	0	0	7	0	0	2	0	5
536	6	1	2	3	0	1	2	0	0
537	9	6	3	0	0	0	0	0	0
538	5	0	0	5	0	1	2	0	2
539	12	0	1	11	0	5	5	0	1
540	7	0	0	7	0	4	1	0	2
541	6	0	0	6	0	1	2	0	3
542	9	0	0	9	0	4	3	0	2
543	6	0	0	6	0	1	1	0	4
544	6	2	0	4	0	1	1	0	2
545	8	0	0	8	0	2	3	0	3
546	5	0	2	3	0	1	1	0	1
547	10	0	0	10	0	5	3	0	2
548	6	0	0	6	0	1	3	0	2
549	2	0	0	2	0	0	1	0	1
550	6	0	0	6	0	1	3	0	2
551	6	0	0	6	0	2	2	0	2
552	7	0	0	7	0	2	4	0	1
553	8	0	0	8	0	2	4	0	2
554	5	0	0	5	0	1	1	0	3
555	2	0	0	2	0	0	1	0	1
556	2	0	0	2	0	1	0	0	1
557	12	0	1	11	0	2	5	0	4
558	0	0	0	0	0	0	0	0	0
559	2	0	0	2	0	1	1	0	0
560	2	0	0	2	0	1	1	0	0
561	4	0	1	3	3	2	1	0	0
562	4	0	1	3	0	0	1	0	2
563	6	2	1	3	0	0	0	0	3
564	4	0	1	3	0	1	0	0	2
565	2	0	0	2	0	1	0	0	1
566	4	0	0	4	0	1	1	0	2
567	5	0	0	5	0	2	2	0	1
568	5	0	0	5	0	2	2	0	1
569	2	0	1	1	0	0	0	0	1
570	2	0	0	2	0	1	1	0	0
571	6	0	0	6	0	3	2	0	1
572	3	0	0	3	0	1	2	0	0
573	6	0	0	6	0	2	1	0	3
574	7	0	1	6	0	2	3	0	1
575	6	0	0	6	0	3	2	0	1
576	2	0	0	2	0	1	0	0	1
577	6	0	0	6	0	3	3	0	0
578	3	0	1	2	0	0	1	0	1
579	5	0	0	5	0	0	1	0	4
580	2	0	0	2	0	1	0	0	1
581	4	0	1	3	0	1	2	0	0
582	11	0	0	11	0	2	4	0	5
583	5	0	0	5	0	2	1	0	2
584	2	0	0	2	0	0	1	0	1
585	2	0	1	1	1	0	1	0	0
586	4	0	0	4	0	2	2	0	0
587	0	0	0	0	0	0	0	0	0
588	2	0	0	2	0	0	0	0	2
589	7	0	1	6	0	2	3	0	1
590	4	0	2	2	0	0	0	0	2
591	2	0	2	0	0	0	0	0	0
592	5	0	0	5	0	2	3	0	0
593	2	0	0	2	0	0	1	0	1
594	2	0	0	2	0	0	1	0	1
595	3	0	1	2	0	0	1	0	1
596	4	0	0	4	0	2	1	0	1
597	0	0	0	0	0	0	0	0	0
598	2	0	0	2	0	1	1	0	0
599	4	0	0	4	0	1	2	0	1
600	3	0	0	3	0	0	2	0	1

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
601	4	0	1	3	3	1	1	0	0
602	6	0	0	6	0	2	1	0	3
603	2	0	1	1	0	0	0	0	1
604	2	0	0	2	0	0	1	0	1
605	6	0	0	6	0	2	3	2	1
606	6	0	1	5	0	2	1	0	2
607	6	0	0	6	0	2	2	0	2
608	4	0	0	4	0	2	2	0	0
609	4	0	0	4	0	2	2	0	0
610	2	0	0	2	0	0	1	0	1
611	3	0	0	3	0	1	2	0	0
612	3	0	0	3	0	1	2	0	0
613	5	0	1	4	4	0	3	0	0
614	5	0	1	4	0	1	1	0	2
615	6	0	0	6	0	2	2	0	2
616	2	0	0	2	0	1	0	0	1
617	2	0	1	1	0	0	1	0	0
618	2	0	0	2	0	1	0	0	1
619	2	0	0	2	0	0	0	0	2
620	6	0	1	5	5	1	1	0	0
621	6	2	1	3	0	1	0	0	2
622	3	0	0	3	0	1	2	0	0
623	2	0	0	2	0	1	1	0	0
624	3	0	0	3	0	1	1	0	1
625	2	0	0	2	0	1	1	0	0
626	7	0	0	7	0	1	3	0	3
627	2	0	0	2	0	0	1	0	1
628	2	0	0	2	0	1	0	0	1
629	1	0	0	1	0	0	1	0	0
630	8	0	0	8	0	2	3	0	3
631	2	0	1	1	0	0	1	0	0
632	2	0	0	2	0	1	1	0	0
633	3	0	0	3	0	1	1	0	1
634	3	0	1	2	2	1	1	0	0
635	5	0	0	5	0	2	3	0	0
636	2	0	0	2	0	0	1	0	1
637	5	0	0	5	0	1	2	0	2
638	6	0	0	6	0	2	2	0	2
639	2	0	0	2	0	1	1	0	0
640	0	0	0	0	0	0	0	0	0
641	5	0	0	5	0	1	3	0	1
642	5	0	0	5	0	3	0	0	2
643	2	0	2	0	0	0	0	0	0
644	3	0	1	2	0	1	0	0	1
645	2	0	0	2	0	0	0	0	2
646	2	0	0	2	0	1	0	0	1
647	[illegible]	0	0	2	0	1	1	0	0
648	2	0	0	2	0	1	1	0	0
649	2	0	0	2	0	1	0	0	1
650	3	0	2	1	0	0	1	0	0

ID/2	P	S	R	M	F	D	N	G	X
651	6	0	0	6	0	0	3	0	3
652	5	0	0	5	0	1	2	0	2
653	6	0	0	6	0	1	1	0	4
654	2	0	0	2	0	1	1	0	0
655	9	0	0	9	0	3	1	0	5
656	4	0	0	4	0	1	1	0	2
657	5	0	0	5	0	3	2	0	0
658	4	0	0	4	0	2	1	0	1
659	2	0	0	2	0	1	1	0	0
660	5	0	1	4	0	1	1	0	2
661	3	0	0	3	0	1	1	0	1
662	2	0	0	2	0	1	0	0	1
663	2	0	0	2	0	1	1	0	0
664	7	0	0	7	0	2	3	0	2
665	3	0	0	3	0	2	0	0	1
666	2	0	0	2	0	1	1	0	0
667	2	0	0	2	0	1	0	0	1
668	0	0	0	0	0	0	0	0	0
669	2	0	0	2	0	1	1	0	0
670	8	0	0	8	0	3	1	0	4
671	2	0	0	2	0	1	1	0	0
672	6	0	0	6	0	3	2	0	1
673	6	0	0	6	0	2	3	0	1
674	6	0	0	6	0	1	2	0	3
675	4	0	0	4	0	2	2	0	0
676	7	0	0	7	0	3	2	0	2
677	4	0	0	4	0	1	2	0	1
678	6	0	0	6	0	2	3	0	1
679	4	0	0	4	0	1	1	0	2
680	7	0	0	7	0	2	2	0	3
681	7	0	1	6	0	2	3	0	1
682	0	0	0	0	0	0	0	0	0
683	10	0	0	10	0	2	5	0	3
684	6	0	0	6	0	2	2	0	2
685	3	0	0	3	0	0	1	0	2
686	2	0	0	2	0	1	1	0	0
687	8	0	0	8	0	3	4	0	1
688	0	0	0	0	0	0	0	0	0
689	6	0	0	6	0	2	2	0	2
690	6	0	0	6	0	3	2	0	1
691	6	0	1	5	0	0	2	0	3
692	3	0	0	3	0	1	1	0	1
693	2	0	0	2	0	1	1	0	0
694	8	0	1	7	0	2	3	0	2
695	6	0	0	6	0	1	3	0	2
696	2	0	1	1	0	0	1	0	0
697	7	0	0	7	0	2	3	0	2
698	7	0	0	7	0	1	5	0	1
699	8	0	0	8	0	4	3	0	1
700	7	0	1	6	0	2	3	0	1

ID/2	P	S	R	M	F	D	N	G	X
701	9	0	0	9	0	3	3	0	3
702	3	0	0	3	0	0	1	0	2
703	7	0	1	6	0	2	3	0	1
704	6	0	0	6	0	2	2	0	2
705	7	0	0	7	0	2	2	0	3
706	8	0	1	7	0	1	3	0	3
707	5	0	1	4	4	1	1	0	0
708	4	0	0	4	0	1	1	0	2
709	3	0	1	2	0	1	1	0	0
710	6	0	0	6	0	2	2	0	2
711	2	0	0	2	0	1	1	0	0
712	7	0	0	7	0	3	2	0	2
713	2	0	0	2	0	1	1	0	0
714	3	0	0	3	0	1	1	0	1
715	2	0	0	2	0	0	0	0	2
716	6	0	0	6	0	2	1	0	3
717	4	0	0	4	0	2	1	0	1
718	3	0	1	2	0	0	2	0	0
719	2	0	0	2	0	1	1	0	0
720	8	0	0	8	0	3	3	0	2
721	6	0	0	6	0	2	3	0	1
722	4	0	1	3	0	0	1	0	2
723	4	0	0	4	0	2	2	0	0
724	6	0	0	6	0	1	1	0	4
725	4	0	1	3	0	1	2	0	0
726	4	0	0	4	0	1	1	0	2
727	5	0	0	5	0	1	2	0	2
728	3	0	0	3	0	1	1	0	1
729	2	0	0	2	0	1	0	0	1
730	6	0	0	6	0	2	2	0	2
731	6	0	0	6	0	1	4	0	1
732	8	0	0	8	0	3	4	0	1
733	0	0	0	0	0	0	0	0	0
734	2	0	0	2	0	1	1	0	0
735	6	0	0	6	0	1	2	0	3
736	3	0	0	3	0	0	1	0	2
737	2	0	0	2	0	1	1	0	0
738	4	0	0	4	0	2	1	0	1
739	2	0	0	2	0	1	1	0	0
740	5	0	1	4	0	2	2	0	0
741	2	0	0	2	0	1	1	0	0
742	3	0	0	3	0	1	2	0	0
743	4	0	1	3	0	2	1	0	0
744	4	0	0	4	0	1	2	0	1
745	6	0	0	6	0	2	2	0	2
746	2	0	0	2	0	0	0	0	2
747	2	0	0	2	0	0	0	0	2
748	4	0	1	3	0	1	1	0	1
749	4	0	1	3	0	2	1	0	0
750	6	0	0	6	0	2	2	0	2

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
751	7	0	0	7	0	2	2	0	3
752	6	0	1	5	0	2	2	0	1
753	2	0	0	2	0	0	0	0	2
754	4	0	0	4	0	2	2	0	0
755	0	0	0	0	0	0	0	0	0
756	7	0	2	5	0	0	3	0	2
757	3	0	0	3	0	0	1	0	2
758	4	0	0	4	0	2	2	0	0
759	5	0	0	5	0	2	2	0	1
760	2	0	1	1	0	0	1	0	0
761	2	0	0	2	0	0	0	0	2
762	2	0	1	1	0	0	0	0	1
763	7	0	0	7	0	3	2	0	2
764	3	0	0	3	0	1	1	0	1
765	5	0	0	5	0	2	3	0	0
766	4	0	0	4	0	2	2	0	0
767	4	0	0	4	0	1	2	0	1
768	2	0	0	2	0	1	1	0	0
769	4	0	1	3	0	2	1	0	0
770	2	0	0	2	0	0	0	0	2
771	3	0	0	3	0	0	2	0	1
772	6	0	0	6	0	2	2	0	2
773	5	0	0	5	0	1	2	0	2
774	2	0	0	2	0	0	0	0	2
775	2	0	0	2	0	1	1	0	0
776	5	0	0	5	0	1	2	0	2
777	2	0	0	2	0	1	1	0	0
778	3	0	1	2	0	1	1	0	0
779	4	0	0	4	0	1	1	0	2
780	5	0	0	5	0	2	3	0	0
781	3	0	0	3	0	1	0	0	2
782	6	0	0	6	0	2	2	0	2
783	6	0	0	6	0	1	1	0	4
784	7	0	1	6	0	0	3	0	3
785	10	0	0	10	0	2	4	0	4
786	4	0	0	4	0	1	2	0	1
787	5	0	0	5	0	3	2	0	0
788	3	0	0	3	0	1	1	0	1
789	0	0	0	0	0	0	0	0	0
790	2	0	0	2	0	1	1	0	0
791	2	0	0	2	0	1	0	0	1
792	2	0	0	2	0	1	0	0	1
793	2	0	0	2	0	1	1	0	0
794	8	0	1	7	0	1	5	0	1
795	7	0	0	7	0	1	3	0	3
796	8	0	0	8	0	3	2	0	3
797	4	0	0	4	0	1	0	0	3
798	2	0	0	2	0	1	0	0	1
799	1	0	0	1	0	0	0	0	1
800	6	2	1	3	0	2	1	0	0
801	3	0	1	2	0	0	1	0	1
802	2	0	0	2	0	0	0	0	2
803	7	0	0	7	0	1	2	0	4
804	7	0	0	7	0	2	3	0	2
805	8	0	0	8	0	1	3	0	4
806	6	0	1	5	0	2	2	0	1
807	2	0	0	2	0	1	1	0	0
808	7	0	0	7	0	3	2	0	2
809	7	0	0	7	0	3	2	0	2
810	2	0	0	2	0	1	1	0	0
811	4	0	0	4	0	1	2	0	1
812	8	0	0	8	0	2	4	0	2
813	6	0	0	6	0	3	3	0	0
814	6	0	0	6	0	2	3	0	1
815	3	0	0	3	0	0	2	0	1
816	2	0	0	2	0	1	0	0	1
817	7	0	1	6	0	2	4	0	0
818	4	0	0	4	0	0	2	0	2
819	6	0	1	5	5	1	1	0	0
820	0	0	0	0	0	0	0	0	0
821	6	0	1	5	5	2	3	0	0
822	4	0	0	4	0	1	1	0	2
823	7	0	0	7	0	2	3	0	2
824	2	0	0	2	0	0	1	0	1
825	2	0	0	2	0	1	1	0	0
826	2	0	0	2	0	0	0	0	2
827	7	0	0	7	0	3	1	0	3
828	8	0	0	8	0	1	3	0	4
829	4	0	0	4	0	0	1	0	3
830	4	0	0	4	0	2	2	0	0
831	9	0	0	9	0	3	3	0	3
832	13	0	1	12	0	1	5	0	6
833	3	0	0	3	0	1	2	0	0
834	3	0	0	3	0	1	2	0	0
835	0	0	0	0	0	0	0	0	0
836	6	0	0	6	0	3	2	0	1
837	7	0	0	7	0	3	3	0	1
838	0	0	0	0	0	0	0	0	0
839	4	0	0	4	0	2	2	0	0
840	2	0	0	2	0	1	1	0	0
841	4	0	0	4	0	2	0	0	2
842	4	0	0	4	0	1	1	0	2
843	9	0	0	9	0	2	1	0	6
844	1	0	0	1	0	0	0	0	1
845	6	0	0	6	0	3	3	0	0
846	8	0	0	8	0	2	3	0	3
847	8	1	0	7	0	2	3	0	2
848	6	0	0	6	0	2	0	0	4
849	8	0	2	6	0	1	3	0	2
850	4	0	1	3	3	1	1	0	0
851	2	0	0	2	0	0	0	0	2
852	2	0	0	2	0	1	1	0	0
853	2	0	0	2	0	1	1	0	0
854	2	0	0	2	0	1	1	0	0
855	3	0	0	3	0	1	2	0	0
856	5	0	1	4	0	0	0	0	4
857	4	0	0	4	0	1	3	0	0
858	2	0	1	1	0	0	0	0	1
859	0	0	0	0	0	0	0	0	0
860	4	0	0	4	0	1	0	0	3
861	7	0	2	5	0	2	1	0	2
862	6	0	0	6	0	3	2	0	1
863	6	0	0	6	0	2	3	0	1
864	6	0	0	6	0	2	4	0	0
865	2	0	0	2	0	1	1	0	0
866	5	0	0	5	0	1	1	0	3
867	4	0	0	4	0	1	1	0	2
868	2	0	0	2	0	1	0	0	1
869	7	0	1	6	0	2	3	0	1
870	2	0	0	2	0	0	0	0	2
871	6	0	1	5	0	2	2	0	1
872	8	0	1	7	0	2	2	0	3
873	8	0	1	7	0	2	4	0	1
874	4	0	0	4	0	2	0	0	2
875	0	0	0	0	0	0	0	0	0
876	5	0	0	5	0	1	3	0	1
877	4	4	0	0	0	0	0	0	0
878	2	0	0	2	0	1	1	0	0
879	6	0	0	6	0	1	2	0	3
880	2	0	0	2	0	1	1	0	0
881	0	0	0	0	0	0	0	0	0
882	2	0	0	2	0	1	0	0	1
883	2	0	1	1	0	1	0	0	0
884	4	0	1	3	0	0	1	0	2
885	4	0	0	4	0	0	0	0	4
886	7	0	0	7	0	2	3	0	2
887	4	0	1	3	0	1	1	0	1
888	6	0	0	6	0	1	2	0	3
889	8	0	1	7	0	2	3	0	2
890	3	0	0	3	0	1	1	0	1
891	4	0	0	4	0	0	1	0	3
892	4	0	0	4	0	1	2	0	1
893	4	0	0	4	0	2	0	0	2
894	6	0	0	6	0	1	2	0	3
895	3	0	0	3	0	2	1	0	0
896	6	0	0	6	0	0	2	0	4
897	7	0	0	7	0	3	3	0	1
898	2	0	0	2	0	0	0	0	2
899	5	0	0	5	0	1	1	0	3
900	6	0	0	6	0	2	2	0	2

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
901	4	0	0	4	0	1	2	0	1
902	4	0	0	4	0	2	2	0	0
903	4	0	1	3	0	1	2	0	0
904	4	0	1	3	0	2	1	0	0
905	4	0	0	4	0	2	1	0	1
906	4	0	0	4	0	1	0	0	3
907	6	0	0	6	0	2	2	0	2
908	6	0	0	6	0	0	2	0	4
909	4	0	1	3	0	0	1	0	2
910	7	0	1	6	0	2	3	0	1
911	3	0	1	2	0	1	0	0	1
912	6	0	0	6	0	3	3	0	0
913	4	0	0	4	0	0	2	0	2
914	2	0	0	2	0	1	0	0	1
915	2	0	0	2	0	0	1	0	1
916	2	0	0	2	0	0	1	0	1
917	4	0	0	4	0	2	1	0	1
918	4	0	0	4	0	1	2	0	1
919	6	0	0	6	0	2	3	0	1
920	4	0	0	4	0	2	2	0	0
921	4	0	0	4	0	1	2	0	1
922	6	0	0	6	0	1	3	0	2
923	4	0	1	3	0	2	1	0	0
924	8	0	0	8	0	3	5	0	0
925	4	0	0	4	0	2	1	0	1
926	4	0	0	4	0	2	2	0	0
927	6	0	1	5	0	2	3	0	0
928	9	0	0	9	0	2	5	0	2
929	6	0	0	6	0	2	4	0	0
930	3	0	0	3	0	1	2	0	0
931	6	0	1	5	0	2	3	0	0
932	4	0	0	4	0	2	2	0	0
933	5	0	1	4	0	1	2	0	1
934	4	0	0	4	0	1	1	0	2
935	6	0	0	6	0	2	2	0	2
936	4	0	0	4	0	2	0	0	2
937	2	0	0	2	0	0	0	0	2
938	2	0	0	2	0	0	0	0	2
939	4	0	0	4	0	1	2	0	1
940	11	0	1	10	0	3	3	0	4
941	7	0	0	7	0	2	3	0	2
942	8	0	0	8	0	1	3	0	4
943	5	0	0	5	0	1	2	0	2
944	8	0	0	8	0	3	3	0	2
945	14	0	0	14	0	4	4	0	6
946	9	0	0	9	0	2	2	0	5
947	14	0	0	14	0	4	7	0	3
948	7	0	1	6	0	2	2	0	2
949	6	0	0	6	0	1	3	0	2
950	9	0	0	9	0	2	1	0	6
951	7	0	0	7	0	3	1	0	3
952	9	0	0	9	0	4	4	0	1
953	6	0	0	6	0	1	2	0	3
954	7	0	0	7	0	2	3	1	2
955	8	0	0	8	0	3	2	0	3
956	5	0	0	5	0	2	1	0	2
957	9	3	0	6	0	1	2	0	3
958	4	0	0	4	0	2	1	0	1
959	6	0	0	6	0	3	2	0	1
960	9	0	1	8	0	3	3	0	2
961	7	0	1	6	0	3	1	0	2
962	9	0	2	7	0	1	3	0	3
963	7	0	0	7	0	3	3	0	1
964	5	0	0	5	0	2	3	0	0
965	1	0	0	1	0	0	0	0	1
966	7	2	0	5	0	1	1	0	3
967	2	0	0	2	0	1	1	0	0
968	2	0	0	2	0	0	1	0	1
969	7	0	1	6	0	3	2	0	1
970	3	0	1	2	0	0	1	0	1
971	2	0	0	2	0	0	1	0	1
972	3	0	0	3	0	1	2	0	0
973	3	0	1	2	0	1	0	0	1
974	2	0	0	2	0	1	1	0	0
975	2	0	0	2	0	1	1	0	0
976	0	0	0	0	0	0	0	0	0
977	2	0	0	2	0	2	0	0	0
978	0	0	0	0	0	0	0	0	0
979	0	0	0	0	0	0	0	0	0
980	2	0	1	1	0	0	1	0	0
981	0	0	0	0	0	0	0	0	0
982	0	0	0	0	0	0	0	0	0
983	0	0	0	0	0	0	0	0	0
984	2	0	0	2	0	1	1	0	0
985	2	0	0	2	0	1	0	0	1
986	5	0	1	4	0	1	2	0	1
987	2	0	0	2	0	1	0	0	1
988	0	0	0	0	0	0	0	0	0
989	3	0	1	2	0	2	0	0	0
990	0	0	0	0	0	0	0	0	0
991	2	0	1	1	0	0	0	0	1
992	2	0	0	2	0	1	1	0	0
993	0	0	0	0	0	0	0	0	0
994	0	0	0	0	0	0	0	0	0
995	2	0	1	1	0	0	1	0	0
996	22	0	1	21	0	7	6	0	8
997	0	0	0	0	0	0	0	0	0
998	0	0	0	0	0	0	0	0	0
999	0	0	0	0	0	0	0	0	0
1000	0	0	0	0	0	0	0	0	0
1001	0	0	0	0	0	0	0	0	0
1002	1	0	0	1	0	1	0	0	0
1003	0	0	0	0	0	0	0	0	0
1004	0	0	0	0	0	0	0	0	0
1005	0	0	0	0	0	0	0	0	0
1006	2	0	0	2	0	1	0	0	1
1007	2	0	0	2	0	1	1	0	0
1008	0	0	0	0	0	0	0	0	0
1009	0	0	0	0	0	0	0	0	0
1010	3	0	0	3	0	1	2	0	0
1011	0	0	0	0	0	0	0	0	0
1012	2	2	0	0	0	0	0	0	0
1013	0	0	0	0	0	0	0	0	0
1014	2	0	0	2	0	1	0	0	1
1015	1	0	0	1	0	1	0	0	0
1016	2	0	1	1	0	0	1	0	0
1017	2	0	0	2	0	1	1	0	0
1018	3	0	0	3	0	1	2	0	0
1019	0	0	0	0	0	0	0	0	0
1020	2	0	0	2	0	0	0	0	2
1021	2	0	0	2	0	0	1	0	1
1022	2	0	0	2	0	1	1	0	0
1023	6	0	1	5	0	1	2	0	2
1024	3	0	1	2	0	0	1	0	1
1025	2	0	0	2	0	1	1	0	0
1026	2	0	0	2	0	1	0	0	1
1027	3	0	0	3	0	0	2	0	1
1028	3	0	1	2	0	0	2	0	0
1029	2	0	0	2	0	2	0	0	0
1030	0	0	0	0	0	0	0	0	0
1031	2	0	0	2	0	1	1	0	0
1032	0	0	0	0	0	0	0	0	0
1033	1	0	0	1	0	0	1	0	0
1034	2	0	0	2	0	1	1	0	0
1035	2	0	0	2	0	1	1	0	0
1036	0	0	0	0	0	0	0	0	0
1037	2	0	0	2	0	1	0	0	1
1038	0	0	0	0	0	0	0	0	0
1039	5	0	1	4	0	0	0	0	4
1040	4	0	1	3	0	1	2	0	0
1041	2	0	0	2	0	0	0	0	2
1042	0	0	0	0	0	0	0	0	0
1043	3	0	0	3	0	1	1	0	1
1044	11	0	1	10	0	5	4	0	1
1045	5	0	0	5	0	0	1	0	4
1046	9	0	1	8	0	2	4	0	2
1047	6	0	0	6	0	3	1	0	2
1048	7	0	0	7	0	4	0	0	3
1049	7	0	0	7	0	3	3	0	1
1050	7	0	0	7	0	2	1	0	4

IMPS Statistics Catalog

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1052	5	1	0	4	0	2	1	0	1
1053	7	0	0	7	0	3	4	0	0
1054	7	7	0	0	0	0	0	0	0
1055	6	0	0	6	0	2	3	0	1
1056	6	0	1	5	0	2	0	0	3
1057	4	0	0	4	0	2	2	0	0
1058	7	0	1	6	0	4	1	0	1
1059	4	0	0	4	0	2	1	0	1
1060	5	0	0	5	0	2	2	0	1
1061	4	0	1	3	0	1	1	0	1
1062	5	1	2	2	0	1	0	0	1
1063	7	0	0	7	0	2	2	0	3
1064	4	0	0	4	0	1	1	0	2
1065	6	0	1	5	0	1	2	0	2
1066	2	0	0	2	0	1	1	0	0
1067	8	2	1	5	0	1	3	0	1
1068	6	0	0	6	0	3	0	0	3
1069	7	0	1	6	0	1	4	0	1
1070	13	0	1	12	0	4	5	0	3
1071	11	4	2	5	0	2	2	0	1
1072	5	1	0	4	0	1	1	0	2
1073	6	0	2	4	0	1	3	0	0
1074	0	0	0	0	0	0	0	0	0
1075	7	0	0	7	0	3	3	0	1
1076	9	3	1	5	0	1	0	0	4
1077	7	0	0	7	0	3	1	0	3
1078	9	1	0	8	0	3	3	0	2
1079	8	0	1	7	0	2	3	0	2
1080	9	0	2	7	0	2	3	0	2
1081	7	0	1	6	0	2	4	0	0
1082	7	0	1	6	0	1	2	0	3
1083	7	0	0	7	0	1	2	0	4
1084	11	8	2	1	0	1	0	0	0
1085	0	0	0	0	0	0	0	0	0
1086	5	0	0	5	0	1	2	0	2
1087	3	0	0	3	0	1	0	0	2
1088	5	0	0	5	0	2	3	0	0
1089	10	0	1	9	0	2	4	0	3
1090	2	0	0	2	0	1	0	0	1
1091	0	0	0	0	0	0	0	0	0
1092	3	0	0	3	0	0	2	0	1
1093	5	0	0	5	0	2	2	0	1
1094	9	0	1	8	0	3	4	0	1
1095	5	0	1	4	0	1	3	0	0
1096	8	0	0	8	0	2	4	0	2
1097	4	2	1	1	0	0	0	0	1
1098	11	0	1	10	0	5	2	0	3
1099	2	0	0	2	0	1	0	0	1
1100	6	0	0	6	0	1	2	0	3
1101	7	0	0	7	0	2	1	0	4
1102	9	0	0	9	0	3	4	0	2
1103	6	0	0	6	0	1	0	0	5
1104	4	0	0	4	0	2	1	0	1
1105	4	2	0	2	0	0	1	0	1
1106	7	2	3	2	0	1	0	0	1
1107	8	0	1	7	0	2	4	0	1
1108	7	5	2	0	0	0	0	0	0
1109	5	0	1	4	0	1	1	0	2
1110	8	2	0	6	0	1	3	0	2
1111	11	0	2	9	0	4	3	0	2
1112	9	0	0	9	0	3	2	0	4
1113	6	0	2	4	0	0	2	0	2
1114	2	1	1	0	0	0	0	0	0
1115	2	0	0	2	0	0	1	0	1
1116	2	0	0	2	0	1	0	0	1
1117	2	0	0	2	0	0	0	0	2
1118	3	0	0	3	0	0	2	0	1
1119	2	2	0	0	0	0	0	0	0
1120	2	0	1	1	0	1	0	0	0
1121	4	0	0	4	0	0	1	0	3
1122	2	0	0	2	0	1	1	0	0
1123	2	1	0	1	0	0	0	0	1
1124	4	2	0	2	0	0	0	0	2
1125	7	1	2	4	0	3	1	0	0
1126	2	0	1	1	0	0	0	0	1
1127	2	0	0	2	0	1	1	0	0
1128	3	0	1	2	0	0	0	0	2
1129	2	0	0	2	0	1	1	0	0
1130	1	0	0	1	0	0	0	0	1
1131	2	0	0	2	0	1	0	0	1
1132	3	0	0	3	0	2	1	0	0
1133	2	0	0	2	0	1	1	0	0
1134	2	0	0	2	0	0	1	0	1
1135	3	0	0	3	0	1	2	0	0
1136	0	0	0	0	0	0	0	0	0
1137	4	0	0	4	0	2	2	0	0
1138	0	0	0	0	0	0	0	0	0
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1143	2	0	0	2	0	0	1	0	1
1144	0	0	0	0	0	0	0	0	0
1145	0	0	0	0	0	0	0	0	0
1146	0	0	0	0	0	0	0	0	0
1147	0	0	0	0	0	0	0	0	0
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1149	5	0	1	4	0	2	2	0	0
1150	4	4	0	0	0	0	0	0	0
1151	5	0	1	4	0	3	0	0	1
1152	4	0	0	4	0	2	2	0	0
1153	7	0	1	6	0	3	3	0	0
1154	5	0	0	5	0	2	2	0	1
1155	4	0	0	4	0	2	2	0	0
1156	4	0	0	4	0	2	1	0	1
1157	8	0	0	8	0	3	4	0	1
1158	10	0	0	10	0	6	3	0	1
1159	6	0	1	5	0	2	2	0	1
1160	6	0	0	6	0	2	0	0	4
1161	6	0	1	5	0	1	3	0	1
1162	14	0	1	13	13	4	5	0	0
1163	9	0	0	9	0	2	3	0	4
1164	7	0	0	7	0	3	1	0	3
1165	4	0	1	3	0	1	1	0	1
1166	19	0	1	18	0	5	6	0	7
1167	5	0	0	5	0	1	0	0	4
1168	6	0	1	5	0	3	1	0	1
1169	5	0	0	5	0	2	3	0	0
1170	6	0	0	6	0	2	2	0	2
1171	5	0	1	4	0	0	3	0	1
1172	7	0	1	6	0	1	2	0	3
1173	8	0	1	7	0	3	1	0	3
1174	10	0	1	9	0	2	2	0	5
1175	7	0	0	7	0	2	3	0	2
1176	9	0	2	7	0	2	3	7	0
1177	8	0	0	8	0	2	1	0	5
1178	6	0	0	6	0	0	1	0	5
1179	9	1	3	5	0	0	2	0	3
1180	8	0	1	7	0	3	3	0	1
1181	9	0	0	9	0	4	4	0	1
1182	7	0	1	6	0	2	1	0	3
1183	6	0	1	5	0	1	1	0	3
1184	8	0	1	7	0	0	3	5	1
1185	8	2	2	4	0	0	3	0	1
1186	6	0	0	6	0	3	2	0	1
1187	7	0	0	7	0	2	2	0	3
1188	5	0	1	4	0	0	1	0	3
1189	7	0	1	6	0	2	3	0	1
1190	6	0	0	6	0	3	2	0	1
1191	8	0	0	8	0	3	2	0	3
1192	3	0	0	3	0	1	1	0	1
1193	7	0	1	6	0	2	1	0	3
1194	4	0	1	3	0	0	1	0	2
1195	4	0	0	4	0	0	1	0	3
1196	6	0	0	6	0	0	1	0	5
1197	4	0	0	4	0	1	2	0	1
1198	10	0	0	10	0	3	4	0	3
1199	4	0	1	3	0	1	1	0	1
1200	6	0	0	6	0	1	1	0	4

IMPS Statistics Catalog

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1202	9	0 0 9 0 2 3 0 4
1203	6	0 1 5 0 2 2 0 1
1204	3	0 0 3 0 1 2 0 0
1205	8	0 1 7 0 1 4 0 2
1206	10	0 2 8 0 1 3 0 4
1207	8	0 0 8 0 3 5 0 0
1208	6	0 0 6 0 2 2 0 2
1209	10	0 2 8 0 3 3 0 2
1210	3	0 0 3 0 1 1 0 1
1211	6	0 0 6 0 2 3 0 1
1212	4	0 0 4 0 2 0 0 2
1213	6	0 0 6 0 2 3 0 1
1214	2	0 0 2 0 1 1 0 0
1215	10	0 010 0 3 5 0 2
1216	2	0 0 2 0 0 1 0 1
1217	2	0 0 2 0 1 0 0 1
1218	2	0 0 2 0 0 1 0 1
1219	5	0 1 4 0 0 3 0 1
1220	4	0 0 4 0 1 1 0 2
1221	4	0 0 4 0 1 2 0 1
1222	5	0 0 5 0 2 2 0 1
1223	4	0 0 4 0 2 1 0 1
1224	5	0 0 5 0 3 1 0 1
1225	6	0 0 6 0 3 3 0 0
1226	3	0 0 3 0 1 1 0 1
1227	2	0 0 2 0 1 1 0 0
1228	3	0 0 3 0 1 2 0 0
1229	5	0 1 4 0 1 2 0 1
1230	7	0 1 6 0 2 1 0 3
1231	5	0 0 5 0 2 2 0 1
1232	1	0 0 1 0 0 0 0 1
1233	5	0 0 5 0 2 2 0 1
1234	4	0 1 3 0 0 2 0 1
1235	4	0 0 4 0 1 2 0 1
1236	6	0 1 5 0 1 1 0 3
1237	6	0 1 5 0 3 2 0 0
1238	7	0 0 7 0 2 3 0 2
1239	7	0 0 7 0 3 2 0 2
1240	6	0 2 4 0 2 1 0 1
1241	4	0 0 4 0 1 1 0 2
1242	7	0 1 6 6 2 2 0 0
1243	4	0 0 4 0 1 3 0 0
1244	12	0 111 0 2 5 0 4
1245	8	0 0 8 0 3 5 0 0
1246	4	0 0 4 0 2 2 0 0
1247	6	0 0 6 0 4 2 0 0
1248	4	0 0 4 0 2 1 0 1
1249	6	0 0 6 0 3 1 0 2
1250	4	0 0 4 0 2 0 0 2
1251	0	0 0 0 0 0 0 0 0
1252	4	1 0 3 0 2 1 0 0
1253	4	0 2 2 0 1 1 0 0
1254	4	0 0 4 0 2 2 0 0
1255	4	0 0 4 0 2 1 0 1
1256	4	0 0 4 0 1 1 0 2
1257	6	0 0 6 0 3 1 0 2
1258	4	0 0 4 0 0 1 0 3
1259	4	0 0 4 0 2 2 0 0
1260	4	0 1 3 0 1 1 0 1
1261	4	0 0 4 0 2 2 0 0
1262	7	0 0 7 0 3 3 0 1
1263	4	0 0 4 0 1 0 0 3
1264	0	0 0 0 0 0 0 0 0
1265	6	0 1 5 0 0 2 0 3
1266	11	0 011 0 5 5 0 1
1267	4	0 0 4 0 0 2 0 2
1268	4	0 1 3 0 0 1 0 2
1269	5	0 1 4 0 2 2 0 0
1270	7	0 0 7 0 1 1 0 5
1271	4	0 0 4 0 1 2 0 1
1272	6	0 0 6 0 3 2 0 1
1273	7	0 3 4 0 1 2 0 1
1274	6	0 0 6 0 3 2 0 1
1275	5	0 0 5 0 3 1 0 1
1276	4	0 0 4 0 1 2 0 1
1277	7	0 0 7 0 2 2 0 3
1278	5	0 0 5 0 1 2 0 2
1279	4	0 0 4 0 1 1 0 2
1280	8	0 0 8 0 3 2 0 3
1281	3	0 0 3 0 1 1 0 1
1282	6	0 1 5 0 1 1 0 3
1283	4	0 0 4 0 1 1 0 2
1284	2	0 0 2 0 1 1 0 0
1285	9	0 0 9 0 2 3 0 4
1286	4	0 0 4 0 1 1 0 2
1287	4	0 0 4 0 2 2 0 0
1288	8	0 0 8 0 2 3 0 3
1289	4	0 0 4 0 1 1 0 2
1290	4	0 0 4 0 0 0 0 4
1291	4	0 0 4 0 1 1 0 2
1292	4	0 0 4 0 1 1 0 2
1293	8	3 1 4 0 1 3 0 0
1294	4	0 0 4 0 2 2 0 0
1295	4	0 0 4 0 0 0 0 4
1296	3	0 0 3 0 1 2 0 0
129[illegible]	[illegible]	0 0 8 0 1 1 0 6
12[illegible]	4	0 1 3 3 1 2 0 0
1299	0	0 0 0 0 0 0 0 0
1300	10	0 010 0 3 4 0 3
1301	10	0 1 9 0 2 3 0 4
1302	9	0 0 9 0 3 2 0 4
1303	3	0 0 3 0 1 1 0 1
1304	0	0 0 0 0 0 0 0 0
1305	6	0 0 6 0 3 1 0 2
1306	6	0 0 6 0 3 1 0 2
1307	7	0 0 7 0 1 2 0 4
1308	8	0 1 7 0 4 1 0 2
1309	8	0 0 8 0 3 4 0 1
1310	6	0 1 5 0 1 2 0 2
1311	3	0 2 1 0 0 1 0 0
1312	6	0 0 6 0 3 2 0 1
1313	8	0 1 7 0 3 2 0 2
1314	12	0 012 0 6 3 0 3
1315	4	0 0 4 0 1 1 0 2
1316	4	0 0 4 0 1 0 0 3
1317	13	0 211 0 3 5 0 3
1318	6	0 0 6 0 1 2 0 3
1319	8	0 0 8 0 2 3 0 3
1320	8	0 2 6 0 3 1 0 2
1321	4	0 2 2 0 0 1 0 1
1322	6	0 2 4 0 2 1 0 1
1323	7	0 1 6 0 1 3 0 2
1324	8	0 0 8 0 3 1 0 4
1325	0	0 0 0 0 0 0 0 0
1326	7	0 2 5 0 3 2 0 0
1327	6	0 0 6 0 2 2 0 2
1328	6	0 1 5 0 1 3 0 1
1329	9	0 0 9 0 3 6 0 0
1330	5	0 2 3 0 1 1 0 1
1331	7	0 0 7 0 4 1 0 2
1332	7	0 0 7 0 3 4 0 0
1333	6	0 0 6 0 2 3 0 1
1334	2	0 0 2 0 1 1 0 0
1335	8	0 0 8 0 2 2 0 4
1336	25	0 12424 911 0 0
1337	6	0 1 5 0 2 1 0 2
1338	2	0 0 2 0 1 0 0 1
1339	6	0 1 5 0 1 3 0 1
1340	0	0 0 0 0 0 0 0 0
1341	6	0 0 6 0 1 3 0 2
1342	2	0 0 2 0 1 0 0 1
1343	2	0 0 2 0 1 1 0 0
1344	6	0 0 6 0 3 2 0 1
1345	9	0 0 9 0 3 4 0 2
1346	3	0 0 3 0 0 0 0 3
1347	4	0 1 3 0 0 0 0 3
1348	0	0 0 0 0 0 0 0 0
1349	4	0 0 4 0 2 1 0 1
1350	5	0 0 5 0 1 3 0 1

IMPS Statistics Catalog

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1353	0	0	0	0	0	0	0	0	0
1354	2	0	0	2	0	0	1	0	1
1355	6	0	1	5	0	1	2	0	2
1356	3	0	0	3	0	1	1	0	1
1357	1	0	0	1	0	0	1	0	0
1358	6	0	0	6	0	1	2	0	3
1359	6	0	0	6	0	2	3	0	1
1360	6	0	0	6	0	1	2	0	3
1361	3	0	0	3	0	1	2	0	0
1362	3	0	0	3	0	1	2	0	0
1363	6	0	0	6	0	3	3	0	0
1364	7	0	1	6	0	1	4	0	1
1365	7	1	0	6	0	3	2	0	1
1366	6	0	0	6	0	3	3	0	0
1367	4	0	0	4	0	0	1	0	3
1368	2	0	0	2	0	1	1	0	0
1369	2	0	0	2	0	0	1	0	1
1370	7	0	1	6	0	2	3	0	1
1371	4	0	0	4	0	1	1	0	2
1372	8	0	1	7	0	1	3	0	3
1373	2	0	1	1	0	1	0	0	0
1374	1	0	0	1	0	0	1	0	0
1375	4	1	0	3	0	1	2	0	0
1376	10	0	2	8	0	3	2	0	3
1377	3	0	0	3	0	2	1	0	0
1378	2	0	0	2	0	0	0	0	2
1379	3	0	0	3	0	1	1	0	1
1380	5	0	0	5	0	1	1	0	3
1381	3	0	0	3	0	1	1	0	1
1382	2	0	0	2	0	0	1	0	1
1383	2	0	0	2	0	1	1	0	0
1384	3	0	0	3	0	1	2	0	0
1385	2	0	0	2	0	1	1	0	0
1386	4	0	0	4	0	2	0	0	2
1387	3	0	3	0	0	0	0	0	0
1388	0	0	0	0	0	0	0	0	0
1389	6	0	0	6	0	2	3	0	1
1390	6	0	0	6	0	2	3	0	1
1391	0	0	0	0	0	0	0	0	0
1392	4	0	0	4	0	1	2	0	1
1393	2	0	0	2	0	0	1	0	1
1394	2	0	0	2	0	0	0	0	2
1395	3	0	0	3	0	1	2	0	0
1396	4	0	1	3	0	1	1	0	1
1397	2	0	0	2	0	1	0	0	1
1398	4	0	0	4	0	1	2	0	1
1399	8	0	0	8	0	1	4	0	3
1400	2	0	0	2	0	1	0	0	1
1401	5	0	1	4	0	2	2	0	0
1402	5	0	2	3	0	1	1	0	1
1403	4	0	0	4	0	1	0	0	3
1404	4	0	1	3	0	1	1	0	1
1405	2	0	0	2	0	1	1	0	0
1406	0	0	0	0	0	0	0	0	0
1407	2	0	0	2	0	1	1	0	0
1408	3	0	0	3	0	0	1	0	2
1409	11	2	1	8	0	4	1	0	3
1410	2	0	0	2	0	1	1	0	0
1411	3	0	0	3	0	2	1	0	0
1412	2	0	0	2	0	0	1	0	1
1413	6	0	0	6	0	4	2	0	0
1414	2	0	0	2	0	2	0	0	0
1415	0	0	0	0	0	0	0	0	0
1416	6	0	2	4	0	1	1	0	2
1417	5	2	0	3	0	1	1	0	1
1418	7	0	0	7	0	1	2	0	4
1419	2	0	0	2	0	1	0	0	1
1420	6	0	0	6	0	2	3	0	1
1421	4	0	1	3	0	1	2	0	0
1422	2	0	0	2	0	0	1	0	1
1423	10	0	0	10	0	5	2	0	3
1424	7	0	0	7	0	4	2	0	1
1425	2	0	0	2	0	1	1	0	0
1426	5	3	1	1	0	1	0	0	0
1427	8	0	0	8	0	3	4	0	1
1428	0	0	0	0	0	0	0	0	0
1429	4	0	1	3	0	2	1	0	0
1430	4	1	0	3	0	1	1	0	1
1431	6	0	1	5	0	1	2	0	2
1432	6	0	1	5	0	1	3	0	1
1433	12	0	0	12	0	4	4	0	4
1434	5	0	0	5	0	2	3	0	0
1435	0	0	0	0	0	0	0	0	0
1436	0	0	0	0	0	0	0	0	0
1437	2	0	0	2	0	1	0	0	1
1438	3	0	0	3	0	1	2	0	0
1439	0	0	0	0	0	0	0	0	0
1440	8	0	0	8	0	3	4	0	1
1441	5	0	0	5	0	2	3	0	0
1442	4	0	0	4	0	2	2	0	0
1443	6	0	0	6	0	2	2	0	2
1444	4	1	2	1	0	0	1	0	0
1445	5	0	0	5	0	1	2	0	2
1446	0	0	0	0	0	0	0	0	0
1447	0	0	0	0	0	0	0	0	0
1448	10	0	0	10	0	3	4	0	3
1449	6	0	0	6	0	3	1	0	2
1450	5	0	0	5	0	1	2	0	2
1451	8	0	1	7	0	3	3	0	1
1452	6	0	2	4	0	1	2	0	1
1453	10	1	0	9	0	4	4	0	1
1454	7	1	1	5	0	2	1	0	2
1455	7	0	0	7	0	4	3	0	0
1456	0	0	0	0	0	0	0	0	0
1457	6	0	1	5	0	2	1	0	2
1458	6	0	0	6	0	3	2	0	1
1459	5	0	0	5	0	2	2	0	1
1460	6	0	0	6	0	2	3	0	1
1461	8	0	1	7	0	2	5	0	0
1462	7	0	1	6	0	1	4	0	1
1463	5	0	2	3	0	0	2	0	1
1464	10	0	0	10	0	3	4	0	3
1465	11	0	2	9	0	4	5	0	0
1466	0	0	0	0	0	0	0	0	0
1467	4	0	0	4	0	2	1	0	1
1468	6	0	0	6	0	2	2	0	2
1469	7	0	0	7	0	2	3	0	2
1470	8	0	2	6	0	1	2	0	3
1471	8	2	2	4	0	1	2	0	1
1472	20	0	0	20	0	7	6	0	7
1473	9	0	2	7	0	2	2	0	3
1474	9	0	1	8	0	2	3	0	3
1475	6	0	1	5	0	1	2	0	2
1476	12	0	1	11	0	2	3	0	6
1477	2	0	0	2	0	0	0	0	2
1478	3	0	0	3	0	1	1	0	1
1479	2	0	0	2	0	0	0	0	2
1480	2	0	0	2	0	1	0	0	1
1481	9	0	0	9	0	2	2	2	4
1482	12	0	0	12	0	3	2	0	7
1483	2	0	0	2	0	0	1	0	1
1484	5	0	0	5	0	1	3	0	1
1485	15	0	0	15	0	5	7	0	3
1486	6	0	0	6	0	2	2	0	2
1487	2	0	0	2	0	1	1	0	0
1488	8	0	1	7	0	3	2	0	2
1489	12	0	1	11	0	4	2	2	4
1490	0	0	0	0	0	0	0	0	0
1491	12	0	0	12	0	6	5	0	1
1492	2	0	0	2	0	1	1	0	0
1493	4	0	1	3	0	1	2	0	0
1494	6	0	0	6	0	3	1	0	2
1495	2	0	0	2	0	1	1	0	0
1496	9	0	2	7	0	3	1	0	3
1497	2	0	1	1	0	0	0	0	1
1498	2	0	1	1	0	1	0	0	0
1499	2	0	0	2	0	1	1	0	0
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IMPS Statistics Catalog

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1504	2	0	0	2	0	1	1	0	0
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1506	7	0	1	6	0	1	2	0	3
1507	6	0	0	6	0	3	3	0	0
1508	2	0	0	2	0	1	1	0	0
1509	12	0	1	11	0	3	5	0	3
1510	2	0	0	2	0	1	1	0	0
1511	9	0	1	8	0	2	4	0	2
1512	2	0	0	2	0	1	1	0	0
1513	9	0	1	8	0	2	2	0	4
1514	6	0	0	6	0	1	2	0	3
1515	8	0	0	8	0	3	3	0	2
1516	5	0	1	4	0	0	3	0	1
1517	8	0	2	6	0	1	1	2	4
1518	4	2	0	2	0	0	1	0	1
1519	7	0	0	7	0	1	3	0	3
1520	4	0	0	4	0	2	1	0	1
1521	7	0	0	7	0	3	4	0	0
1522	4	0	0	4	0	1	1	0	2
1523	4	0	0	4	0	1	2	0	1
1524	7	0	0	7	0	2	3	0	2
1525	6	0	0	6	0	2	1	0	3
1526	7	0	0	7	0	3	3	0	1
1527	9	0	0	9	0	3	2	0	4
1528	8	0	1	7	0	1	5	0	1
1529	9	0	0	9	0	3	2	0	4
1530	7	0	0	7	0	3	4	0	0
1531	2	0	0	2	0	0	1	0	1
1532	2	0	0	2	0	1	1	0	0
1533	5	0	0	5	0	3	2	0	0
1534	7	0	1	6	0	3	3	0	0
1535	7	0	0	7	0	2	3	0	2
1536	4	0	0	4	0	2	1	0	1
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1538	7	0	0	7	0	3	3	0	1
1539	2	0	1	1	0	0	0	0	1
1540	7	0	0	7	0	2	4	0	1
1541	4	0	0	4	0	0	2	0	2
1542	16	0	4	12	0	4	4	1	4
1543	9	0	1	8	0	2	3	0	3
1544	6	0	0	6	0	2	3	0	1
1545	4	0	0	4	0	1	2	0	1
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1552	10	0	0	10	0	5	3	0	2
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1560	2	0	0	2	0	1	0	0	1
1561	2	0	0	2	0	1	0	0	1
1562	6	0	0	6	0	2	1	0	3
1563	0	0	0	0	0	0	0	0	0
1564	4	0	0	4	0	1	2	0	1
1565	8	0	1	7	0	2	1	0	4
1566	2	0	0	2	0	0	0	0	2
1567	5	0	0	5	0	2	2	0	1
1568	10	0	0	10	0	4	3	0	3
1569	2	0	0	2	0	1	1	0	0
1570	0	0	0	0	0	0	0	0	0
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1572	2	0	0	2	0	1	0	0	1
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1574	2	0	0	2	0	1	1	0	0
1575	6	0	0	6	0	2	2	0	2
1576	2	0	0	2	0	0	1	0	1
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1581	2	0	0	2	0	1	1	0	0
1582	5	0	0	5	0	2	2	0	1
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1586	13	0	2	11	0	3	5	0	3
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1590	10	0	1	9	0	1	4	0	4
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1592	9	0	1	8	0	4	1	0	3
1593	5	0	0	5	0	3	1	0	1
1594	8	0	0	8	0	3	2	0	3
1595	4	0	0	4	0	1	2	0	1
1596	7	0	1	6	0	0	3	0	3
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1599	3	0	0	3	0	1	2	0	0
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1605	0	0	0	0	0	0	0	0	0
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1607	4	0	1	3	0	2	1	0	0
1608	2	0	0	2	0	2	0	0	0
1609	2	0	0	2	0	1	0	0	1
1610	3	0	0	3	0	1	2	0	0
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1612	6	0	1	5	0	1	0	0	4
1613	4	0	0	4	0	2	2	0	0
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1623	11	0	1	10	0	1	3	0	6
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1628	7	0	0	7	0	2	3	0	2
1629	2	0	1	1	0	0	1	0	0
1630	4	0	0	4	0	3	0	0	1
1631	5	0	1	4	0	2	1	0	1
1632	14	0	0	14	0	3	5	0	6
1633	0	0	0	0	0	0	0	0	0
1634	9	0	2	7	0	1	3	0	3
1635	11	0	0	11	0	4	6	0	1
1636	12	0	1	11	0	3	3	0	5
1637	5	0	1	4	0	0	2	0	2
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1640	6	0	0	6	0	2	2	0	2
1641	3	0	0	3	0	1	2	0	0
1642	2	0	1	1	0	0	1	0	0
1643	2	0	0	2	0	0	1	0	1
1644	12	0	0	12	0	5	3	0	4
1645	6	0	0	6	0	2	2	0	2
1646	7	0	0	7	0	3	2	0	2
1647	1	0	0	1	0	1	0	0	0
1648	8	0	0	8	0	3	4	0	1
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IMPS Statistics Catalog

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1653	3	0 0 3 0 1 1 0 1	1703	6	0 0 6 0 1 1 0 4	1753	9	0 1 8 8 2 3 0 0
1654	4	0 0 4 0 1 1 0 2	1704	7	0 0 7 0 3 2 0 2	1754	4	0 1 3 0 1 2 0 0
1655	7	0 0 7 0 2 3 0 2	1705	13	0 013 0 5 6 0 2	1755	6	0 0 6 0 3 1 0 2
1656	5	0 0 5 0 2 1 0 2	1706	6	0 0 6 0 2 1 0 3	1756	2	0 0 2 0 0 0 0 2
1657	3	0 0 3 0 1 1 0 1	1707	3	0 0 3 0 1 0 0 2	1757	2	0 0 2 0 0 1 0 1
1658	4	0 0 4 0 1 1 0 2	1708	7	0 0 7 0 3 3 0 1	1758	5	0 0 5 0 2 2 0 1
1659	4	0 0 4 0 2 1 0 1	1709	4	0 0 4 0 1 1 0 2	1759	5	0 1 4 0 1 3 0 0
1660	4	0 0 4 0 1 1 0 2	1710	1	0 0 1 0 1 0 0 0	1760	2	0 1 1 0 0 0 0 1
1661	6	0 1 5 0 2 2 0 1	1711	4	0 0 4 0 1 2 0 1	1761	9	0 2 7 0 1 2 2 3
1662	2	0 0 2 0 1 1 0 0	1712	3	0 0 3 0 1 1 0 1	1762	6	0 0 6 0 0 4 0 2
1663	4	0 0 4 0 1 2 0 1	1713	4	0 0 4 0 2 2 0 0	1763	7	0 1 6 0 1 2 0 3
1664	7	0 0 7 0 1 4 0 2	1714	3	0 0 3 0 2 1 0 0	1764	7	0 0 7 0 2 2 0 3
1665	5	0 0 5 0 3 2 0 0	1715	5	0 0 5 0 1 1 0 3	1765	8	0 1 7 0 4 2 0 1
1666	7	0 1 6 0 1 2 0 3	1716	2	0 0 2 0 1 0 0 1	1766	8	0 0 8 0 2 3 0 3
1667	5	0 0 5 0 1 3 0 1	1717	0	0 0 0 0 0 0 0 0	1767	7	0 0 7 0 3 4 0 0
1668	7	2 0 5 0 2 2 0 1	1718	8	0 1 7 7 1 2 0 0	1768	4	0 0 4 0 0 1 0 3
1669	4	0 1 3 0 1 2 0 0	1719	4	0 0 4 0 2 2 0 0	1769	6	0 0 6 0 2 2 0 2
1670	6	0 0 6 0 2 1 0 3	1720	4	0 0 4 0 2 1 0 1	1770	4	0 0 4 0 1 2 0 1
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1673	9	0 0 9 0 3 1 0 5	1723	6	0 0 6 0 2 1 0 3	1773	7	0 0 7 0 3 3 0 1
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1678	8	0 0 8 0 3 1 0 4	1728	4	0 0 4 0 1 2 0 1	1778	8	0 0 8 0 4 3 0 1
1679	4	0 0 4 0 2 2 0 0	1729	4	0 0 4 0 0 1 0 3	1779	3	0 1 2 0 1 0 0 1
1680	4	0 0 4 0 1 0 0 3	1730	4	0 1 3 0 0 1 0 2	1780	3	0 0 3 0 2 1 0 0
1681	6	5 0 1 0 0 0 0 1	1731	4	0 0 4 0 0 1 0 3	1781	8	0 1 7 7 4 2 0 0
1682	8	0 1 7 0 2 4 0 1	1732	4	0 0 4 0 2 1 0 1	1782	2	0 0 2 0 1 1 0 0
1683	11	0 2 9 0 2 6 0 1	1733	4	0 0 4 0 1 1 0 2	1783	12	0 111 0 4 5 0 2
1684	6	0 0 6 0 2 2 0 2	1734	7	0 0 7 0 3 3 0 1	1784	10	0 010 0 4 4 0 2
16851421		0 141 01415 012	1735	8	0 1 7 0 3 1 0 3	1785	5	0 0 5 0 1 2 0 2
1686	6	0 1 5 0 2 2 0 1	1736	4	0 0 4 0 1 2 0 1	1786	2	0 0 2 0 1 1 0 0
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1692	5	0 0 5 0 1 2 0 2	1742	4	0 0 4 0 2 1 0 1	1792	9	0 0 9 0 4 1 0 4
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1694	4	0 0 4 0 2 1 0 1	1744	3	0 0 3 0 1 1 0 1	1794	8	0 1 7 0 0 3 0 4
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1697	7	0 0 7 0 1 3 0 3	1747	10	0 010 0 4 3 0 3	1797	2	0 0 2 0 1 1 0 0
1698	6	0 0 6 0 2 2 0 2	1748	4	0 0 4 0 1 2 0 1	1798	11	0 110 0 2 6 0 2
1699	2	1 0 1 0 0 1 0 0	1749	6	0 0 6 0 1 4 0 1	1799	6	0 1 5 0 2 2 0 1
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IMPS Statistics Catalog

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1804	3	3	0	0	0	0	0	0	0
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1806	2	0	1	1	0	1	0	0	0
1807	2	0	0	2	0	1	1	0	0
1808	7	0	0	7	0	2	3	0	2
1809	10	0	2	8	0	3	1	0	4
1810	6	1	4	1	0	1	0	0	0
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1812	6	0	2	4	0	1	2	0	1
1813	4	0	0	4	0	1	1	0	2
1814	2	0	0	2	0	1	1	0	0
1815	12	0	0	12	0	6	3	0	3
1816	7	0	0	7	0	1	1	0	5
1817	4	0	0	4	0	1	2	0	1
1818	2	0	1	1	0	1	0	0	0
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1821	6	0	0	6	0	2	2	0	2
1822	2	2	0	0	0	0	0	0	0
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1824	11	0	0	11	0	3	6	0	2
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1828	6	0	0	6	0	3	3	0	0
1829	5	0	0	5	0	1	2	0	2
1830	7	1	2	4	0	2	1	0	1
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1833	6	0	0	6	0	2	2	2	2
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1836	6	3	3	0	0	0	0	0	0
1837	6	0	0	6	0	1	4	0	1
1838	2	0	0	2	0	0	0	0	2
1839	5	0	0	5	0	1	3	0	1
1840	7	0	0	7	0	4	2	0	1
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1844	9	0	2	7	0	1	3	0	3
1845	5	0	0	5	0	1	3	0	1
1846	5	3	0	2	0	0	1	0	1
1847	9	0	0	9	0	4	4	0	1
1848	8	0	0	8	0	1	3	0	4
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1856	2	0	0	2	0	1	0	0	1
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1858	8	0	2	6	0	2	2	0	2
1859	6	0	1	5	0	2	3	0	0
1860	15	0	0	15	0	5	6	3	2
1861	15	0	0	15	0	7	7	0	1
1862	4	0	0	4	0	0	1	0	3
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1864	7	0	1	6	0	1	4	0	1
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1866	4	0	0	4	0	1	1	0	2
1867	3	0	1	2	0	0	1	0	1
1868	3	0	1	2	0	0	2	0	0
1869	6	0	0	6	0	2	2	0	2
1870	2	0	0	2	0	0	1	0	1
1871	6	0	1	5	0	1	2	0	2
1872	7	0	0	7	0	3	2	0	2
1873	5	0	1	4	0	2	0	0	2
1874	2	0	1	1	0	0	1	0	0
1875	8	0	1	7	0	2	3	0	2
1876	2	0	0	2	0	1	1	0	0
1877	2	0	1	1	0	1	0	0	0
1878	5	0	0	5	0	2	0	0	3
1879	2	0	0	2	0	0	1	0	1
1880	6	0	0	6	0	3	3	0	0
1881	4	0	0	4	0	2	1	0	1
1882	7	0	0	7	0	3	3	0	1
1883	6	0	0	6	0	1	2	0	3
1884	4	0	0	4	0	2	1	0	1
1885	2	0	0	2	0	1	1	0	0
1886	2	0	1	1	1	0	1	0	0
1887	2	0	0	2	0	1	1	0	0
1888	5	0	0	5	0	1	3	0	1
1889	2	0	0	2	0	1	1	0	0
1890	2	0	1	1	0	1	0	0	0
1891	6	0	0	6	0	3	2	0	1
1892	4	0	0	4	0	2	1	0	1
1893	2	0	0	2	0	1	1	0	0
1894	4	0	0	4	0	2	2	0	0
1895	2	0	0	2	0	0	0	0	2
1896	3	0	0	3	0	1	2	0	0
1897	6	2	2	2	0	0	2	0	0
1898	2	0	0	2	0	1	1	0	0
1899	4	0	0	4	0	0	1	0	3
1900	2	0	0	2	0	1	1	0	0
1901	6	0	0	6	0	2	3	0	1
1902	7	0	1	6	0	1	4	0	1
1903	7	0	0	7	0	2	3	0	2
1904	11	4	5	2	0	1	1	0	0
1905	6	0	0	6	0	1	2	0	3
1906	12	0	0	12	0	6	6	0	0
1907	7	0	0	7	0	2	3	0	2
1908	3	0	0	3	0	1	2	0	0
1909	6	0	1	5	5	2	3	0	0
1910	6	0	0	6	0	3	3	0	0
1911	7	0	0	7	0	2	3	0	2
1912	1	0	0	1	0	0	1	0	0
1913	4	0	0	4	0	1	1	0	2
1914	11	10	1	0	0	0	0	0	0
1915	6	0	0	6	0	2	2	0	2
1916	7	0	1	6	0	2	4	0	0
1917	6	0	0	6	0	2	2	0	2
1918	9	0	0	9	0	2	4	0	3
1919	4	0	0	4	0	1	2	0	1
1920	2	0	1	1	1	1	0	0	0
1921	4	0	1	3	0	1	1	0	1
1922	0	0	0	0	0	0	0	0	0
1923	3	0	1	2	0	1	1	0	0
1924	2	0	0	2	0	0	0	0	2
1925	7	5	1	1	0	0	1	0	0
1926	3	0	0	3	0	1	1	0	1
1927	5	0	1	4	0	2	2	0	0
1928	7	0	0	7	0	1	2	0	4
1929	5	0	0	5	0	1	2	0	2
1930	8	0	0	8	0	3	4	0	1
1931	4	0	0	4	0	1	1	0	2
1932	7	0	1	6	0	3	1	0	2
1933	7	0	0	7	0	3	3	0	1
1934	6	0	0	6	0	2	2	0	2
1935	7	0	1	6	0	1	3	0	2
1936	2	0	0	2	0	1	1	0	0
1937	8	0	0	8	0	2	5	0	1
1938	5	0	1	4	0	1	3	0	0
1939	1	0	0	1	0	1	0	0	0
1940	2	0	0	2	0	1	1	0	0
1941	2	0	1	1	0	1	0	0	0
1942	6	0	0	6	0	2	2	0	2
1943	5	0	1	4	0	1	3	0	0
1944	4	0	0	4	0	1	2	0	1
1945	4	0	1	3	0	1	1	0	1
1946	7	0	2	5	0	1	2	0	2
1947	0	0	0	0	0	0	0	0	0
1948	2	0	0	2	0	1	0	0	1
1949	4	1	0	3	0	2	0	0	1
1950	3	0	0	3	0	1	0	0	2

IMPS Statistics Catalog

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1952	6	0 2 4 0 2 1 0 1
1953	5	0 2 3 0 1 0 0 2
1954	4	0 1 3 0 1 0 0 2
1955	4	0 1 3 0 2 1 0 0
1956	4	0 0 4 0 2 2 0 0
1957	0	0 0 0 0 0 0 0 0
1958	7	0 0 7 0 3 0 0 4
1959	4	0 0 4 0 2 1 0 1
1960	2	0 0 2 0 1 1 0 0
1961	9	0 0 9 0 2 3 4 3
1962	6	0 0 6 0 1 2 0 3
1963	5	0 0 5 0 1 2 0 2
1964	6	1 0 5 0 3 1 0 1
1965	8	0 0 8 0 2 3 0 3
1966	8	0 0 8 0 2 3 0 3
1967	0	0 0 0 0 0 0 0 0
1968	2	0 0 2 0 1 0 0 1
1969	2	0 0 2 0 0 0 0 2
1970	5	3 0 2 0 1 1 0 0
1971	0	0 0 0 0 0 0 0 0
1972	6	0 0 6 0 1 1 0 4
1973	16	0 214 0 5 5 0 4
1974	5	0 0 5 0 1 3 0 1
1975	6	0 1 5 0 2 3 0 0
1976	17	0 017 0 6 4 0 7
1977	0	0 0 0 0 0 0 0 0
1978	4	0 0 4 0 0 1 0 3
1979	7	0 1 6 6 3 3 0 0
1980	6	0 0 6 0 1 3 0 2
1981	2	0 0 2 0 1 1 0 0
1982	5	0 0 5 0 1 2 0 2
1983	4	0 0 4 0 1 2 0 1
1984	7	0 0 7 0 1 2 0 4
1985	4	0 0 4 0 0 1 0 3
1986	3	0 0 3 0 0 2 0 1
1987	5	0 0 5 0 1 1 0 3
1988	5	0 0 5 0 2 2 0 1
1989	0	0 0 0 0 0 0 0 0
1990	2	0 0 2 0 1 1 0 0
1991	4	2 1 1 0 0 0 0 1
1992	0	0 0 0 0 0 0 0 0
1993	6	0 1 5 5 1 1 0 0
1994	8	0 0 8 0 4 4 0 0
1995	7	4 1 2 0 1 0 0 1
1996	11	0 110 0 4 2 0 4
1997	5	0 0 5 0 2 3 0 0
1998	5	0 0 5 0 1 2 0 2
1999	4	0 0 4 0 1 2 0 1
2000	5	0 1 4 0 2 1 0 1
2001	9	0 1 8 0 2 5 0 1
2002	6	2 0 4 0 2 2 0 0
2003	4	0 1 3 0 1 1 0 1
2004	11	0 110 0 3 4 0 3
2005	13	0 112 0 2 5 0 5
2006	2	0 0 2 0 1 0 0 1
2007	2	0 0 2 0 1 1 0 0
2008	1	0 0 1 0 0 0 0 1
2009	6	0 0 6 0 2 1 0 3
2010	0	0 0 0 0 0 0 0 0
2011	6	4 2 0 0 0 0 0 0
2012	7	0 1 6 0 2 4 0 0
2013	2	0 0 2 0 1 1 0 0
2014	0	0 0 0 0 0 0 0 0
2015	5	0 0 5 0 2 1 0 2
2016	11	0 110 0 1 6 0 3
2017	0	0 0 0 0 0 0 0 0
2018	5	0 0 5 0 0 2 0 3
2019	9	0 0 9 0 3 2 2 4
2020	7	0 0 7 0 3 1 0 3
2021	7	0 0 7 0 3 3 0 1
2022	9	0 0 9 0 4 5 0 0
2023	4	0 0 4 0 2 1 0 1
2024	10	0 010 0 6 2 0 2
2025	0	0 0 0 0 0 0 0 0
2026	6	0 0 6 0 1 2 0 3
2027	4	0 0 4 0 2 1 0 1
2028	7	0 1 6 0 2 1 0 3
2029	8	0 1 7 0 1 5 0 1
2030	14	0 014 0 3 2 0 9
2031	5	0 1 4 0 1 1 0 2
2032	5	0 0 5 0 1 2 0 2
2033	6	0 1 5 0 1 3 0 1
2034	7	0 2 5 0 2 2 0 1
2035	0	0 0 0 0 0 0 0 0
2036	6	0 0 6 0 1 2 0 3
2037	3	0 0 3 0 2 1 0 0
2038	6	0 0 6 0 1 3 0 2
2039	8	0 0 8 0 4 2 0 2
2040	5	0 0 5 0 2 2 0 1
2041	9	0 1 8 0 0 5 0 3
2042	7	0 0 7 0 1 3 0 3
2043	4	0 1 3 0 0 2 0 1
2044	7	0 1 6 0 2 3 0 1
2045	3	0 2 1 0 0 1 0 0
2046	8	0 2 6 0 2 2 4 0
2047	6	0 0 6 0 2 2 0 2
2048	6	0 0 6 0 1 2 0 3
2049	5	0 0 5 0 3 1 0 1
2050	8	0 0 8 0 3 2 0 3
2051	0	0 0 0 0 0 0 0 0
2052	0	0 0 0 0 0 0 0 0
2053	7	0 1 6 0 1 1 0 4
2054	2	0 0 2 0 1 0 0 1
2055	5	0 0 5 0 2 2 0 1
2056	2	0 0 2 0 1 1 0 0
2057	9	0 0 9 0 3 2 0 4
2058	6	0 0 6 0 2 3 0 1
2059	5	0 1 4 0 2 1 0 1
2060	7	0 0 7 0 3 3 0 1
2061	4	0 1 3 0 1 2 0 0
2062	6	0 1 5 0 1 2 0 2
2063	4	2 0 2 0 1 1 0 0
2064	6	0 0 6 0 0 2 0 4
2065	8	0 0 8 0 3 4 0 1
2066	7	0 0 7 0 1 3 0 3
2067	2	0 0 2 0 1 0 0 1
2068	9	0 1 8 0 3 1 0 4
2069	8	0 0 8 0 4 2 0 2
2070	0	0 0 0 0 0 0 0 0
2071	8	0 0 8 0 0 2 0 6
2072	14	0 113 0 4 6 0 3
2073	2	0 0 2 0 0 1 0 1
2074	5	0 0 5 0 2 2 0 1
2075	7	1 0 6 0 2 3 0 1
2076	9	0 0 9 0 3 4 0 2
2077	6	0 0 6 0 3 1 0 2
2078	4	0 0 4 0 1 2 0 1
2079	2	2 0 0 0 0 0 0 0
2080	7	0 0 7 0 1 2 0 4
2081	2	0 0 2 0 1 0 0 1
2082	4	0 0 4 0 1 2 0 1
2083	7	0 0 7 0 3 2 0 2
2084	6	0 0 6 0 1 2 0 3
2085	2	0 0 2 0 1 1 0 0
2086	4	0 0 4 0 1 1 0 2
2087	3	0 1 2 0 1 1 0 0
2088	4	1 1 2 0 0 1 0 1
2089	6	0 3 3 0 0 1 0 2
2090	6	0 0 6 0 3 3 0 0
2091	8	0 1 7 0 3 4 0 0
2092	7	0 0 7 0 3 3 0 1
2093	8	0 0 8 0 3 0 0 5
2094	6	0 1 5 0 2 2 0 1
2095	6	0 0 6 0 2 1 0 3
2096	6	0 0 6 0 2 2 0 2
2097	5	0 5 0 0 0 0 0 0
2098	4	1 2 1 0 0 1 0 0
2099	10	0 1 9 0 2 3 0 4
2100	6	0 0 6 0 3 1 0 2

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
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2102	2	0	0	2	0	0	0	0	2
2103	2	0	0	2	0	1	1	0	0
2104	9	0	0	9	0	3	4	0	2
2105	7	2	0	5	0	2	2	0	1
2106	6	0	0	6	0	1	2	0	3
2107	2	0	0	2	0	1	1	0	0
2108	4	0	0	4	0	2	2	0	0
2109	3	0	0	3	0	1	2	0	0
2110	19	0	0	19	0	5	6	0	8
2111	4	0	1	3	0	1	1	0	1
2112	7	0	1	6	0	3	2	0	1
2113	0	0	0	0	0	0	0	0	0
2114	4	0	1	3	0	0	2	0	1
2115	10	0	0	10	0	4	4	0	2
2116	5	0	0	5	0	2	3	0	0
2117	5	0	0	5	0	2	3	0	0
2118	2	0	0	2	0	1	1	0	0
2119	7	0	0	7	0	2	3	0	2
2120	6	0	1	5	5	2	3	0	0
2121	4	0	2	2	0	0	1	0	1
2122	4	0	0	4	0	1	1	0	2
2123	4	0	0	4	0	0	2	0	2
2124	2	0	0	2	0	1	0	0	1
2125	5	0	0	5	0	2	2	0	1
2126	4	0	0	4	0	1	1	0	2
2127	3	0	0	3	0	0	0	0	3
2128	11	0	1	10	0	2	4	0	4
2129	4	0	0	4	0	2	2	0	0
2130	4	0	1	3	0	1	1	0	1
2131	4	0	0	4	0	1	1	0	2
2132	2	0	0	2	0	1	0	0	1
2133	4	0	0	4	0	2	1	0	1
2134	8	2	1	5	0	1	3	0	1
2135	11	0	0	11	0	1	3	0	7
2136	0	0	0	0	0	0	0	0	0
2137	2	0	0	2	0	1	1	0	0
2138	2	0	0	2	0	0	1	0	1
2139	6	0	0	6	0	3	2	0	1
2140	7	0	0	7	0	2	3	0	2
2141	2	0	0	2	0	1	1	0	0
2142	8	0	0	8	0	3	3	0	2
2143	4	0	1	3	0	0	1	0	2
2144	0	0	0	0	0	0	0	0	0
2145	10	0	1	9	0	3	2	0	4
2146	8	0	0	8	0	3	2	0	3
2147	2	0	0	2	0	1	1	0	0
2148	9	0	0	9	0	3	3	0	3
2149	3	0	0	3	0	0	2	0	1
2150	2	0	0	2	0	0	1	0	1
2151	8	0	1	7	0	1	4	0	2
2152	0	0	0	0	0	0	0	0	0
2153	5	0	0	5	0	2	1	0	2
2154	6	0	0	6	0	4	2	0	0
2155	7	0	0	7	0	2	2	0	3
2156	10	0	0	10	0	4	4	0	2
2157	7	0	0	7	0	2	3	0	2
2158	8	0	1	7	0	2	5	0	0
2159	3	0	0	3	0	1	1	0	1
2160	2	0	0	2	0	1	1	0	0
2161	17	0	1	16	0	4	7	0	5
2162	5	0	1	4	4	1	2	0	0
2163	10	0	0	10	0	4	3	0	3
2164	4	0	0	4	0	0	1	0	3
2165	9	0	0	9	0	3	4	0	2
2166	5	0	0	5	0	0	2	0	3
2167	6	0	0	6	0	2	3	0	1
2168	4	0	0	4	0	0	1	0	3
2169	13	0	0	13	0	3	4	0	6
2170	5	0	0	5	0	0	1	0	4
2171	8	0	0	8	0	3	2	0	3
2172	4	0	0	4	0	1	1	0	2
2173	4	0	0	4	0	2	1	0	1
2174	2	0	0	2	0	1	1	0	0
2175	5	0	1	4	0	1	1	0	2
2176	5	0	0	5	0	2	3	0	0
2177	7	0	1	6	0	2	3	0	1
2178	5	0	0	5	0	1	3	0	1
2179	0	0	0	0	0	0	0	0	0
2180	2	0	0	2	0	0	1	0	1
2181	4	0	0	4	0	1	1	0	2
2182	4	0	0	4	0	1	2	0	1
2183	6	0	0	6	0	2	1	0	3
2184	2	0	0	2	0	1	1	0	0
2185	4	0	1	3	0	1	2	0	0
2186	2	0	0	2	0	1	1	0	0
2187	7	0	1	6	0	2	4	0	0
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2189	7	0	0	7	0	2	2	0	3
2190	5	0	0	5	0	2	3	0	0
2191	8	0	0	8	0	2	2	0	4
2192	11	1	0	10	0	2	6	0	2
2193	6	0	0	6	0	2	3	0	1
2194	3	0	0	3	0	0	1	0	2
2195	6	0	0	6	0	1	4	0	1
2196	9	0	0	9	0	2	3	3	4
2197	2	0	0	2	0	1	0	0	1
2198	8	2	0	6	0	2	3	0	1
2199	6	0	2	4	0	1	1	0	2
2200	3	0	0	3	0	1	2	0	0
2201	7	0	1	6	6	1	1	0	0
2202	4	0	0	4	0	1	1	0	2
2203	0	0	0	0	0	0	0	0	0
2204	3	0	0	3	0	1	2	0	0
2205	2	0	1	1	0	0	0	0	1
2206	7	0	0	7	0	1	2	0	4
2207	3	0	0	3	0	1	2	0	0
2208	7	0	0	7	0	2	3	0	2
2209	4	0	0	4	0	1	1	0	2
2210	4	0	0	4	0	2	0	0	2
2211	7	0	0	7	0	2	3	0	2
2212	4	0	0	4	0	0	1	0	3
2213	9	0	2	7	0	2	4	0	1
2214	5	1	0	4	0	0	2	0	2
2215	5	0	0	5	0	2	3	0	0
2216	0	0	0	0	0	0	0	0	0
2217	2	0	0	2	0	0	1	0	1
2218	9	0	0	9	0	4	3	0	2
2219	4	0	0	4	0	1	1	0	2
2220	0	0	0	0	0	0	0	0	0
2221	6	0	0	6	0	1	3	0	2
2222	11	0	0	11	0	4	4	0	3
2223	7	0	1	6	0	2	3	0	1
2224	0	0	0	0	0	0	0	0	0
2225	2	0	0	2	0	0	1	0	1
2226	13	0	0	13	0	5	3	0	5
2227	6	0	0	6	0	2	2	0	2
2228	7	0	0	7	0	3	2	0	2
2229	2	0	0	2	0	1	1	0	0
2230	8	0	0	8	0	3	2	0	3
2231	6	0	0	6	0	3	2	0	1
2232	2	0	0	2	0	1	1	0	0
2233	2	0	0	2	0	0	0	0	2
2234	2	0	0	2	0	0	1	0	1
2235	0	0	0	0	0	0	0	0	0
2236	6	0	0	6	0	3	2	0	1
2237	4	0	0	4	0	2	1	0	1
2238	7	0	0	7	0	3	2	0	2
2239	4	0	0	4	0	2	2	0	0
2240	4	0	0	4	0	2	2	0	0
2241	3	0	0	3	0	0	2	0	1
2242	3	0	0	3	0	1	0	0	2
2243	0	0	0	0	0	0	0	0	0
2244	5	0	0	5	0	1	0	0	4
2245	2	0	0	2	0	1	1	0	0
2246	19	0	2	17	0	5	7	0	5
2247	5	0	0	5	0	1	1	0	3
2248	2	0	0	2	0	1	1	0	0
2249	2	0	0	2	0	0	1	0	1
2250	2	0	0	2	0	0	0	0	2

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
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2252	2	0	0	2	0	1	1	0	0
2253	2	0	0	2	0	1	1	0	0
2254	8	0	1	7	0	3	2	0	2
2255	2	0	0	2	0	1	0	0	1
2256	4	0	0	4	0	2	2	0	0
2257	4	0	0	4	0	2	2	0	0
2258	2	0	0	2	0	1	1	0	0
2259	4	0	0	4	0	2	2	0	0
2260	8	0	0	8	0	1	3	0	4
2261	2	0	0	2	0	1	1	0	0
2262	7	0	0	7	0	2	2	0	3
2263	6	0	0	6	0	2	2	0	2
2264	9	0	1	8	0	2	5	0	1
2265	6	0	0	6	0	3	3	0	0
2266	6	0	0	6	0	2	3	0	1
2267	7	0	1	6	0	2	3	0	1
2268	5	0	1	4	0	2	1	0	1
2269	4	0	0	4	0	2	2	0	0
2270	3	0	0	3	0	0	1	0	2
2271	5	0	1	4	0	2	1	0	1
2272	9	0	0	9	0	2	4	0	3
2273	3	0	0	3	0	1	2	0	0
2274	4	0	0	4	0	1	1	0	2
2275	6	0	0	6	0	2	2	0	2
2276	9	0	0	9	0	3	3	0	3
2277	0	0	0	0	0	0	0	0	0
2278	2	0	0	2	0	1	1	0	0
2279	4	0	1	3	0	0	1	0	2
2280	2	0	0	2	0	1	1	0	0
2281	6	0	0	6	0	2	3	0	1
2282	4	0	1	3	3	2	1	0	0
2283	4	0	2	2	2	1	1	0	0
2284	2	0	0	2	0	1	1	0	0
2285	4	0	0	4	0	1	2	0	1
2286	5	0	0	5	0	2	2	0	1
2287	2	0	1	1	0	0	1	0	0
2288	4	0	0	4	0	1	2	0	1
2289	7	0	0	7	0	3	2	0	2
2290	2	0	0	2	0	1	1	0	0
2291	3	0	0	3	0	1	2	0	0
2292	6	0	0	6	0	1	0	0	5
2293	6	0	0	6	0	2	1	0	3
2294	6	0	0	6	0	2	2	0	2
2295	4	0	0	4	0	2	2	0	0
2296	7	0	1	6	0	1	4	0	1
2297	5	0	0	5	0	1	2	0	2
2298	6	0	0	6	0	3	2	0	1
2299	7	0	0	7	0	2	3	0	2
2300	4	0	0	4	0	1	1	0	2
2301	14	0	0	14	0	6	5	0	3
2302	2	0	0	2	0	1	1	0	0
2303	2	0	0	2	0	1	0	0	1
2304	2	0	0	2	0	1	1	0	0
2305	6	0	0	6	0	2	2	0	2
2306	5	0	0	5	0	2	1	0	2
2307	2	0	1	1	0	1	0	0	0
2308	5	0	0	5	0	2	3	0	0
2309	0	0	0	0	0	0	0	0	0
2310	0	0	0	0	0	0	0	0	0
2311	3	0	1	2	0	2	0	0	0
2312	7	0	0	7	0	2	1	0	4
2313	8	0	1	7	0	3	4	0	0
2314	5	0	0	5	0	2	1	0	2
2315	2	0	0	2	0	1	0	0	1
2316	5	0	0	5	0	2	3	0	0
2317	1	0	0	1	0	0	1	0	0
2318	10	0	1	9	0	3	3	0	3
2319	2	0	0	2	0	1	1	0	0
2320	9	0	1	8	0	4	3	0	1
2321	6	0	0	6	0	2	1	0	3
2322	3	0	0	3	0	1	2	0	0
2323	2	0	0	2	0	0	1	0	1
2324	6	0	0	6	0	2	2	0	2
2325	2	0	0	2	0	0	1	0	1
2326	7	0	1	6	0	2	2	0	2
2327	4	0	0	4	0	1	1	0	2
2328	4	0	1	3	0	1	0	0	2
2329	5	0	0	5	0	3	2	0	0
2330	2	0	0	2	0	0	1	0	1
2331	12	0	1	11	1	3	2	0	0
2332	5	0	1	4	0	0	1	0	3
2333	4	0	0	4	0	1	2	0	1
2334	9	0	0	9	0	3	4	0	2
2335	7	0	0	7	0	3	2	0	2
2336	6	0	0	6	0	3	3	0	0
2337	6	0	0	6	0	3	3	0	0
2338	10	0	0	10	0	3	3	0	4
2339	6	0	0	6	0	1	2	0	3
2340	5	0	0	5	0	2	2	0	1
2341	4	0	0	4	0	1	1	0	2
2342	7	0	1	6	0	2	3	0	1
2343	2	0	0	2	0	1	0	0	1
2344	6	0	0	6	0	3	3	0	0
2345	2	0	0	2	0	1	1	0	0
2346	7	0	2	5	0	1	1	0	3
2347	6	0	0	6	0	1	2	0	3
2348	2	0	0	2	0	1	1	0	0
2349	2	0	0	2	0	1	1	0	0
2350	7	0	0	7	0	2	4	0	1
2351	2	0	0	2	0	0	1	0	1
2352	4	0	0	4	0	1	1	0	2
2353	4	0	0	4	0	1	0	0	3
2354	2	0	0	2	0	0	1	0	1
2355	4	0	0	4	0	1	1	0	2
2356	6	0	0	6	0	2	0	0	4
2357	0	0	0	0	0	0	0	0	0
2358	3	0	0	3	0	1	2	0	0
2359	2	0	0	2	0	0	0	0	2
2360	5	0	1	4	0	2	1	0	1
2361	4	0	0	4	0	1	2	0	1
2362	4	0	0	4	0	1	1	0	2
2363	2	0	0	2	0	1	1	0	0
2364	2	0	0	2	0	1	1	0	0
2365	6	0	1	5	0	1	2	0	2
2366	5	0	1	4	0	1	2	0	1
2367	7	0	0	7	0	2	2	0	3
2368	6	0	0	6	0	1	3	0	2
2369	2	0	1	1	1	0	0	0	0
2370	2	0	0	2	0	0	0	0	2
2371	0	0	0	0	0	0	0	0	0
2372	2	0	0	2	0	1	0	0	1
2373	8	0	0	8	0	1	3	0	4
2374	6	0	0	6	0	0	1	0	5
2375	4	0	0	4	0	0	2	0	2
2376	5	0	1	4	0	2	2	0	0
2377	4	0	0	4	0	0	1	0	3
2378	2	0	0	2	0	0	0	0	2
2379	5	0	0	5	0	1	2	0	2
2380	8	0	0	8	0	2	4	0	2
2381	10	0	0	10	0	4	2	0	4
2382	6	0	0	6	0	1	2	0	3
2383	2	0	0	2	0	1	1	0	0
2384	11	0	1	10	0	5	3	0	2
2385	4	0	0	4	0	1	2	0	1
2386	6	1	0	5	0	0	2	0	3
2387	10	0	0	10	0	4	3	0	3
2388	4	0	0	4	0	1	2	0	1
2389	4	0	0	4	0	1	1	0	2
2390	7	0	0	7	0	2	3	0	2
2391	7	0	0	7	0	0	2	0	5
2392	6	0	2	4	0	1	1	0	2
2393	4	0	1	3	0	1	2	0	0
2394	8	0	1	7	0	2	3	0	2
2395	6	0	1	5	0	1	2	0	2
2396	6	0	1	5	0	2	2	0	1
2397	4	0	0	4	0	2	2	0	0
2398	6	0	0	6	0	2	2	0	2
2399	8	0	1	7	0	1	4	0	2
2400	3	0	0	3	0	1	1	0	1

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
2401	5	0	1	4	0	1	3	0	0
2402	4	0	0	4	0	2	1	0	1
2403	8	0	1	7	7	2	4	0	0
2404	6	1	0	5	0	1	2	0	2
2405	2	0	0	2	0	1	0	0	1
2406	4	0	0	4	0	2	2	0	0
2407	8	0	0	8	0	2	4	0	2
2408	4	0	0	4	0	2	1	0	1
2409	2	0	0	2	0	1	1	0	0
2410	2	0	0	2	0	1	1	0	0
2411	6	0	0	6	0	2	3	0	1
2412	5	0	1	4	4	2	1	0	0
2413	2	0	0	2	0	1	0	0	1
2414	4	0	0	4	0	2	2	0	0
2415	6	0	1	5	0	1	2	0	2
2416	6	3	1	2	0	1	0	0	1
2417	8	0	1	7	0	2	3	0	2
2418	6	0	0	6	0	1	2	2	1
2419	8	0	0	8	0	2	3	0	3
2420	8	0	1	7	0	2	4	0	1
2421	11	0	11	0	10	3	4	2	0
2422	6	0	0	6	0	1	2	0	3
2423	6	0	0	6	0	1	1	0	4
2424	3	0	0	3	0	2	1	0	0
2425	2	0	0	2	0	1	0	0	1
2426	6	0	0	6	0	1	2	0	3
2427	3	0	0	3	0	1	2	0	0
2428	6	0	0	6	0	2	1	0	3
2429	8	0	0	8	0	2	2	0	4
2430	6	0	1	5	0	2	3	0	0
2431	4	0	0	4	0	2	2	0	0
2432	2	0	0	2	0	1	1	0	0
2433	1	0	0	1	0	0	0	0	1
2434	6	0	0	6	0	2	3	0	1
2435	3	0	0	3	0	1	0	0	2
2436	7	0	1	6	6	1	4	0	0
2437	4	0	0	4	0	1	1	0	2
2438	7	0	0	7	0	2	2	0	3
2439	2	0	0	2	0	1	0	0	1
2440	4	0	0	4	0	2	2	0	0
2441	10	0	1	9	0	3	4	6	1
2442	2	0	0	2	0	0	0	0	2
2443	3	0	0	3	0	1	2	0	0
2444	6	0	0	6	0	2	3	0	1
2445	5	0	1	4	0	2	2	0	0
2446	9	0	0	9	0	3	2	0	4
2447	3	0	0	3	0	0	2	0	1
2448	3	0	0	3	0	1	1	0	1
2449	4	0	0	4	0	1	1	0	2
2450	5	0	0	5	0	1	2	0	2
2451	6	0	0	6	0	2	2	0	2
2452	9	0	0	9	0	4	4	0	1
2453	9	0	0	9	0	4	4	0	1
2454	2	0	0	2	0	1	1	0	0
2455	8	0	1	7	0	2	2	0	3
2456	0	0	0	0	0	0	0	0	0
2457	6	0	2	4	0	2	2	0	0
2458	7	0	0	7	0	2	3	0	2
2459	7	0	1	6	0	1	2	0	3
2460	8	0	0	8	0	3	3	0	2
2461	4	0	2	2	2	0	1	0	0
2462	11	0	11	0	0	5	2	0	3
2463	3	0	0	3	0	0	2	0	1
2464	8	0	0	8	0	3	3	0	2
2465	6	0	1	5	0	2	1	0	2
2466	5	0	0	5	0	0	2	0	3
2467	6	0	0	6	0	3	2	0	1
2468	5	0	1	4	0	1	3	0	0
2469	2	0	0	2	0	0	0	0	2
2470	8	0	1	7	0	3	3	0	1
2471	4	0	1	3	0	1	1	0	1
2472	0	0	0	0	0	0	0	0	0
2473	12	0	0	12	0	2	3	0	7
2474	7	0	0	7	0	3	4	7	0
2475	3	0	0	3	0	1	2	0	0
2476	6	0	0	6	0	2	1	0	3
2477	2	0	0	2	0	1	0	0	1
2478	6	0	1	5	0	1	1	2	1
2479	8	0	1	7	0	3	3	0	1
2480	9	0	0	9	0	3	4	0	2
2481	5	0	0	5	0	3	1	0	1
2482	4	0	0	4	0	2	1	0	1
2483	3	0	0	3	0	1	1	0	1
2484	6	0	0	6	0	1	0	0	5
2485	8	0	1	7	0	3	2	0	2
2486	0	0	0	0	0	0	0	0	0
2487	5	0	0	5	0	1	1	0	3
2488	8	0	0	8	0	2	5	0	1
2489	6	0	0	6	0	2	2	0	2
2490	7	0	0	7	0	2	1	0	4
2491	4	0	0	4	0	2	1	0	1
2492	2	0	0	2	0	1	1	0	0
2493	2	0	0	2	0	0	0	0	2
2494	6	0	0	6	0	3	2	0	1
2495	2	0	0	2	0	0	1	0	1
2496	2	0	1	1	1	1	0	0	0
2497	8	0	0	8	0	3	4	0	1
2498	9	0	1	8	0	3	2	8	0
2499	7	0	1	6	0	0	2	0	4
2500	9	0	0	9	0	4	4	0	1
2501	5	0	0	5	0	1	2	0	2
2502	8	0	0	8	0	2	3	0	3
2503	2	0	0	2	0	1	1	0	0
2504	6	0	0	6	0	1	2	0	3
2505	3	0	0	3	0	1	2	0	0
2506	5	0	0	5	0	1	2	0	2
2507	8	0	1	7	0	2	2	0	3
2508	2	0	0	2	0	1	0	0	1
2509	6	0	1	5	0	3	1	0	1
2510	7	0	2	5	5	3	1	0	0
2511	8	0	2	6	0	2	2	6	0
2512	4	0	0	4	0	1	2	0	1
2513	4	0	0	4	0	1	1	0	2
2514	9	0	0	9	0	4	3	0	2
2515	14	0	0	14	0	5	7	0	2
2516	2	0	0	2	0	0	0	0	2
2517	4	0	0	4	0	2	1	0	1
2518	6	0	0	6	0	2	0	0	4
2519	7	0	0	7	0	1	4	3	0
2520	2	0	0	2	0	0	0	0	2
2521	7	0	2	5	0	1	1	3	0
2522	2	0	0	2	0	1	1	0	0
2523	7	0	0	7	0	2	2	0	3
2524	4	0	1	3	0	1	2	0	0
2525	2	0	0	2	0	1	1	0	0
2526	3	0	0	3	0	0	2	0	1
2527	12	0	2	10	0	1	6	0	3
2528	4	0	1	3	0	2	0	0	1
2529	2	0	0	2	0	1	0	0	1
2530	4	0	0	4	0	1	2	0	1
2531	6	0	1	5	0	1	2	0	2
2532	6	0	0	6	0	1	2	0	3
2533	9	0	0	9	0	4	3	0	2
2534	4	0	0	4	0	1	1	0	2
2535	5	0	0	5	0	2	1	0	2
2536	7	0	0	7	0	2	3	0	2
2537	8	0	2	6	0	1	5	0	0
2538	6	0	0	6	0	2	3	0	1
2539	12	0	0	12	0	4	5	0	3
2540	4	0	0	4	0	0	0	0	4
2541	8	0	1	7	0	2	2	0	3
2542	3	0	0	3	0	1	2	0	0
2543	5	0	0	5	0	1	3	0	1
2544	8	0	0	8	0	2	3	0	3
2545	10	0	0	10	0	3	3	3	2
2546	0	0	0	0	0	0	0	0	0
2547	8	0	0	8	0	3	4	0	1
2548	4	0	0	4	0	0	1	0	3
2549	5	0	0	5	0	1	2	0	2
2550	9	0	1	8	0	2	4	0	2

IMPS Statistics Catalog

ID/2	P	S	R	M	F	D	N	G	X
2551	6	0	0	6	0	2	2	0	2
2552	7	0	0	7	0	0	1	0	6
2553	6	0	1	5	0	1	2	0	2
2554	2	0	0	2	0	1	0	0	1
2555	10	0	1	9	0	1	1	0	7
2556	4	0	0	4	0	2	2	0	0
2557	2	0	0	2	0	1	1	0	0
2558	3	0	0	3	0	1	1	0	1
2559	9	0	2	7	0	2	2	0	3
2560	6	0	0	6	0	2	3	0	1
2561	2	0	0	2	0	1	1	0	0
2562	2	0	0	2	0	1	1	0	0
2563	2	0	0	2	0	1	0	0	1
2564	0	0	0	0	0	0	0	0	0
2565	2	0	0	2	0	1	1	0	0
2566	5	0	0	5	0	2	3	0	0
2567	5	0	0	5	0	1	2	0	2
2568	9	0	0	9	0	2	4	0	3
2569	6	0	0	6	0	2	2	0	2
2570	11	0	1	10	0	4	2	0	4
2571	2	0	1	1	0	1	0	0	0
2572	7	0	0	7	0	2	3	0	2
2573	4	0	0	4	0	2	2	0	0
2574	6	0	0	6	0	2	3	0	1
2575	2	0	0	2	0	1	0	0	1
2576	2	0	0	2	0	1	1	0	0
2577	9	0	0	9	0	4	4	0	1
2578	5	0	0	5	0	2	2	0	1
2579	7	0	1	6	0	1	2	4	1
2580	2	0	0	2	0	1	0	0	1
2581	6	0	2	4	0	0	1	0	3
2582	6	0	0	6	0	3	3	0	0
2583	0	0	0	0	0	0	0	0	0
2584	7	0	1	6	0	1	3	0	2
2585	3	1	1	1	0	0	1	0	0
2586	4	0	0	4	0	2	2	0	0
2587	10	0	1	9	0	4	5	0	0
2588	6	0	0	6	0	4	2	0	0
2589	10	0	0	10	0	2	2	0	6
2590	2	0	1	1	0	0	1	0	0
2591	11	0	0	11	0	5	1	0	5
2592	6	0	0	6	0	3	1	0	2
2593	2	0	0	2	0	1	1	0	0
2594	7	0	0	7	0	2	2	0	3
2595	5	0	0	5	0	1	1	0	3
2596	7	0	0	7	0	1	3	0	3
2597	9	0	0	9	0	3	4	0	2
2598	8	0	0	8	0	1	3	0	4
2599	8	0	0	8	0	1	4	0	3
2600	5	0	0	5	0	1	3	0	1
2601	7	0	0	7	0	2	3	0	2
2602	8	0	0	8	0	3	3	0	2
2603	5	0	2	3	0	1	1	0	1
2604	8	0	1	7	0	3	2	2	1
2605	9	0	0	9	0	2	3	0	4
2606	4	0	0	4	0	0	0	2	2
2607	8	0	0	8	0	4	1	0	3
2608	7	0	0	7	0	2	4	0	1
2609	6	0	1	5	0	1	2	0	2
2610	3	0	0	3	0	0	2	0	1
2611	7	0	0	7	0	4	2	0	1
2612	13	0	1	12	0	3	7	0	2
2613	7	0	0	7	0	2	2	0	3
2614	4	0	0	4	0	1	2	0	1
2615	2	0	0	2	0	1	1	0	0
2616	4	0	0	4	0	1	1	0	2
2617	4	0	0	4	0	2	2	0	0
2618	4	0	0	4	0	2	2	0	0
2619	6	0	1	5	0	2	1	0	2
2620	2	0	1	1	0	1	0	0	0
2621	4	0	0	4	0	1	1	0	2
2622	7	0	0	7	0	3	3	0	1
2623	4	0	0	4	0	2	2	0	0
2624	8	0	1	7	0	2	4	0	1
2625	1	0	0	1	0	1	0	0	0
2626	4	0	0	4	0	1	1	0	2
2627	7	0	0	7	0	2	3	0	2
2628	4	0	0	4	0	1	1	0	2
2629	6	0	0	6	0	2	3	0	1
2630	11	0	2	9	0	4	4	0	1
2631	4	0	0	4	0	1	2	0	1
2632	2	0	0	2	0	0	1	0	1

Chapter 15

IMPS REJECT CATALOG (FP 105)

Glenn J. Veeder and Edward F. Tedesco

This catalog presents a summary of the number of rejected sightings for each asteroid and the possible reasons for rejection.

This catalog presents a summary of the number of rejected sightings for each asteroid and possible reasons for rejection. There is an entry for each of 1,732 numbered asteroids and 655 ID type 2 asteroids for which at least one sighting was rejected, collated by asteroid in ascending numerical order for ID types 1 and 2. Catalog entries include: asteroid identification number, number of rejected sightings, number of weeks-confirmed (MCON) sightings, number of sightings confused with sources in the IRAS Point Source Catalog (PSC) Version 2, number of sightings whose detectors were all outer slots only (*i.e.*, at the edge of the focal plane array), number of sightings confused with sources in the IRAS Faint Source Survey (FSS) Version 2, number of sightings confused with sources in the IRAS Serendipitous Survey Catalog (SSC), number of times more than one source was associated with a single asteroid prediction, number of sightings with position match scores below the final threshold of 0.4 (these sightings are a subset of those with AStatW bit number 1 set), number of sightings detected only at 25 μm with flux status less than 5 (*i.e.*, not fully seconds-confirmed), number of singletons with flux status less than 5, number of sightings with uniform cross-scan uncertainties above five arcminutes, number of times the color test failed, number of sightings with at least one band having an unacceptable confusion status, number of sightings in which at least one band had an unacceptably low detection correlation coefficient, number of rejected sightings in which the low-albedo test failed in at least one band, number of rejected sightings in which an albedo solution failed to converge in at least one band, and the number of rejected sightings in which an albedo was rejected from the final average by the Chauvenet criterion in at least one band.

The format of the machine-readable file is given in Table 16, page 157. Table 25 lists the parameters presented in the catalog version of this data product.

This catalog presents parameters for all rejected asteroid sightings in IMPS, *i.e.*, for all those in the IMPS Statistics Catalog (FP 104) with R greater than zero.

Table 25. IMPS Reject Catalog

Parameter	Meaning
R	The number of potential sightings which were later rejected.
M	The number of rejected sightings which months-confirmed, *i.e.*, with AStatW bit 5 set.
P	The number of rejected sightings which were associated with a source from the Point Source Catalog, *i.e.*, with AStatW bit 9 set.
O	The number of rejected sightings which only passed over outer slot detectors, *i.e.*, with AStatW bit 10 set.
F	The number of rejected sightings which were associated with a source from the Faint Source Catalog, *i.e.*, with AStatW bit 17 set.
S	The number of rejected sightings which were associated with a source from the Serendipitous Survey Catalog, *i.e.*, with AStatW bit 20 set.
I	The number of rejected sightings with two or more potential asteroid associations, *i.e.*, with AStatW bit 31 set.
L	The number of rejected sightings with low position-match scores.
B	The number of rejected sightings which were band-two only sightings with flux status less than five.
Z	The only sighting was a singleton with a flux status less than five.
U	The number of rejected sightings with cross-scan uncertainties greater than five arcminutes.

Parameter	Meaning
C	The number of rejected sightings which failed the color test.
Q	The number of rejected sightings with confusion status failures.
D	The number of rejected sightings with correlation coefficient failures.
A	The number of rejected sightings with implausibly low geometric albedos, *i.e.*, $p_H < 0.01$.
N	The number of rejected sightings for which the albedo solution failed to converge.
E	The number of rejected sightings which were eliminated by failure to meet Chauvenet's criterion during the averaging procedure.

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
2	3	2	2	1	0	0	1	0	0	0	0	0	2	0	0	1	0
3	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0
4	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
6	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
13	2	0	0	0	0	0	1	0	0	0	0	1	2	0	0	1	0
28	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0
29	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
30	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
31	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
32	2	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0
36	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
42	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
47	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
48	2	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
49	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0
53	2	0	0	2	0	0	0	0	0	0	0	1	1	0	0	1	0
54	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
60	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
61	6	3	1	2	0	0	0	0	0	0	0	2	4	1	0	0	0
63	2	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0
66	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
69	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
75	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
81	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
83	2	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0
96	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0
97	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
101	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
107	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0
109	2	2	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0
112	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
114	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
115	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
118	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
120	4	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
125	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
128	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
129	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
134	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
144	3	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
149	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
151	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
154	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
155	5	3	3	2	2	0	0	1	1	0	0	0	0	1	0	0	0
157	2	1	1	1	2	0	0	0	0	0	0	0	2	0	0	0	0
159	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
161	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
169	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
174	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
175	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
177	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
179	3	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0
180	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
181	4	0	0	2	0	2	0	0	0	0	0	0	1	0	0	0	0
183	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
185	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
189	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
195	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
196	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
197	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
198	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
199	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	3	1	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0
205	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
209	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
211	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
218	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
219	3	2	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0
220	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
221	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
223	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
225	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
226	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
227	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
228	1	1	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
232	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
238	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
245	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
247	2	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0
250	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
251	2	2	2	0	2	0	0	0	0	0	0	1	0	0	0	0	0
254	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
263	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
264	5	2	2	1	0	0	0	0	0	0	0	2	1	0	0	0	0
265	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
267	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
268	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
271	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
277	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
278	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
279	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
281	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
282	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
285	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
286	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
289	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
290	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
291	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
292	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
294	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
295	4	1	1	2	0	0	0	1	1	0	0	1	0	1	0	0	0
297	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
299	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
301	2	0	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0
304	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
308	5	4	4	2	0	0	0	0	0	0	0	0	2	0	0	0	0
309	3	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
310	3	1	1	2	0	0	0	1	0	0	0	0	2	1	0	0	0
312	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
316	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
317	2	1	1	1	1	1	0	0	2	0	0	0	0	1	0	0	0
321	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
323	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
329	1	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0
334	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
337	4	4	4	0	0	0	0	0	0	0	0	0	1	1	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
338	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
345	3	2	2	0	2	0	1	0	0	0	0	1	0	0	0	0	
346	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
355	4	1	0	1	0	0	0	1	0	0	0	1	0	2	0	0	0
360	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	
364	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
366	2	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	
367	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
376	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
380	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
383	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
385	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
386	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
387	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
390	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
391	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
396	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	
397	9	6	6	2	0	0	1	0	1	0	0	0	1	0	0	0	0
398	2	2	2	1	0	0	0	0	2	0	0	0	0	0	0	0	0
400	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
402	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
403	2	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
407	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
408	2	1	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
410	3	1	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0
418	3	2	0	0	0	0	0	1	0	0	0	2	3	2	0	0	0
420	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
425	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
427	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
429	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
437	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
438	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
441	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
444	2	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0
447	2	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
450	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
451	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
452	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
454	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
459	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
461	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
462	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
463	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
466	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
467	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
469	1	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0
470	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
474	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
478	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
479	2	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0
483	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
488	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
491	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
493	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
494	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
496	2	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0
497	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
500	4	1	1	1	1	2	1	0	0	0	0	0	2	0	0	0	0
501	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
502	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
507	2	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	
517	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
520	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
521	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
523	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
526	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
529	3	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0
530	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
531	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
532	5	4	2	0	0	0	0	1	0	0	0	0	2	0	0	0	0
536	5	4	3	1	0	0	1	1	1	0	0	1	2	0	0	0	0
537	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
539	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
540	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
542	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
543	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
546	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
554	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
556	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
559	2	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0	
560	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
561	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
562	3	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0
563	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
565	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
566	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
567	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
571	3	3	1	0	0	0	0	3	0	0	0	2	0	0	2	0	0
573	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
574	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
575	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
576	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
585	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
586	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
589	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
592	3	3	3	0	0	0	0	1	0	0	0	1	0	0	1	0	0
594	5	0	0	1	0	0	0	0	0	0	3	0	1	0	0	0	
595	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	
600	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
603	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
609	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
611	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
614	3	2	2	0	0	0	1	0	0	0	0	0	1	0	0	0	0
615	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
616	4	0	0	3	0	0	0	0	2	0	0	0	0	1	0	0	0
622	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
627	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
629	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
634	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
635	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
637	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
638	4	2	2	0	2	2	1	1	0	0	0	0	1	0	0	0	0
644	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
649	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
651	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
655	2	2	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0
656	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
663	4	2	0	0	0	0	1	0	0	0	0	2	4	0	2	0	0
666	4	2	2	1	2	0	0	1	0	0	0	0	0	0	0	0	0
667	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
669	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
671	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
672	2	0	0	0	1	0	0	0	0	1	0	0	0	2	0	0	0
679	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	1	0
681	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
684	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
685	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
688	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
693	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
697	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
698	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
700	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
701	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
707	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
708	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
710	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
712	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
714	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
715	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
720	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
721	2	2	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0
724	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
725	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
726	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
727	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
728	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
730	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
732	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
733	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
734	5	3	1	2	0	0	0	0	0	0	0	2	1	0	2	0	0
735	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
736	3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0
739	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
742	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
744	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
747	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
750	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
752	2	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0
758	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
759	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
762	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
764	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
766	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
768	3	0	0	0	0	0	0	0	2	1	0	1	0	1	0	0	0
769	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
772	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
779	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
781	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
782	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
786	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
787	3	3	3	1	0	0	0	0	0	0	0	0	0	1	0	0	0
789	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
790	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
791	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
794	3	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
797	2	1	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0
800	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
801	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
804	3	3	3	2	0	0	0	0	0	0	0	0	2	0	0	0	0
807	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
811	2	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
813	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
820	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
823	2	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0
824	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
825	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
826	3	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0
828	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
830	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
833	2	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0
838	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
839	2	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0
840	3	0	0	2	0	0	0	0	0	1	0	0	0	2	0	0	0
841	1	1	1	0	0	0	0	0	0	0	0	1	0	1	1	0	0
842	2	0	0	0	0	0	0	1	0	0	0	2	0	1	0	0	0
844	4	3	3	1	0	1	0	0	0	0	0	2	3	1	1	0	0
848	2	2	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0
850	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
851	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
852	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
856	2	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
857	4	0	0	1	0	0	0	0	1	0	0	1	0	3	0	0	0
860	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
861	4	0	0	3	0	0	1	0	0	0	0	0	1	0	0	0	0
863	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
864	2	1	1	0	0	0	0	1	2	0	0	0	0	1	0	0	0
867	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
871	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
876	2	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
880	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
882	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
886	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
888	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
889	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
896	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
899	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
900	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
901	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
903	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
904	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
908	4	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0	1
911	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
912	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
914	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
916	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
917	2	0	0	1	1	0	0	0	0	0	0	1	0	2	0	0	0
919	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
923	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
925	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
926	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
927	3	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
930	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
933	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
934	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
935	2	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0
937	4	1	1	0	0	0	0	1	2	1	0	0	0	1	0	0	0
938	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
942	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0
946	4	1	1	1	1	0	0	1	0	0	1	1	0	1	0	0	0
947	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
954	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
956	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
963	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
966	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
967	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
968	2	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
972	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
974	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
978	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
979	2	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0
983	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
984	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
986	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
987	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
989	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
992	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
993	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
995	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
999	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1001	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1002	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1003	4	3	3	0	0	0	0	1	1	1	0	3	1	0	0	0	0
1006	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1007	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
1010	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1012	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1013	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1014	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1015	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1018	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1019	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1020	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1024	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1025	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1027	3	0	0	2	0	0	0	0	1	0	0	1	0	1	0	0	0
1028	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1032	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
1033	2	0	0	0	1	0	0	1	1	0	0	0	0	2	0	0	0
1034	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0
1038	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1039	3	3	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1042	2	0	0	1	0	0	1	0	0	0	0	1	1	0	0	0	0
1044	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1045	2	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0
1046	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1049	5	0	0	2	0	0	0	0	0	0	0	0	1	1	3	0	0
1050	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1051	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1052	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1053	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1056	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1057	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1058	2	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0
1059	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
1063	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
1068	2	0	0	0	0	0	0	1	1	1	0	0	0	2	0	0	0
1070	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1074	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1075	2	2	2	0	2	0	0	0	0	0	0	0	1	0	0	0	0

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
1078	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1079	3	0	0	1	0	0	0	1	0	0	0	0	0	3	0	0	0
1081	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1084	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1085	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
1088	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1089	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
1094	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1095	2	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0
1099	3	2	2	0	2	0	0	0	0	0	0	2	0	1	0	0	0
1110	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1111	2	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0
1116	2	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0
1118	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1119	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1121	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1123	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1124	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1125	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1127	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1130	1	0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0
1132	3	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0
1138	2	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0
1139	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
1140	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1141	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1143	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1144	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1148	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1149	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1151	3	0	0	1	0	0	0	2	2	1	0	0	0	2	0	0	0
1152	2	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0
1154	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1155	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1156	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
1157	2	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0
1159	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
1162	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
1164	1	1	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0
1168	2	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
1173	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1174	3	0	0	1	0	0	0	1	2	1	0	0	0	0	0	0	0
1175	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1176	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1177	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1178	4	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0
1179	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1180	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1182	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1183	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1184	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0
1185	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1187	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1189	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1190	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1195	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1196	6	1	1	3	0	0	0	1	1	0	0	0	1	0	0	0	0
1198	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
1201	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1202	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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1206	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
1209	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1211	2	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0
1213	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1214	2	0	0	0	0	0	0	1	0	0	1	0	1	1	0	0	0
1218	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1219	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1223	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1226	3	0	0	1	0	0	0	2	0	0	0	0	0	1	0	0	0
1229	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1230	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1231	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1233	4	1	1	0	0	0	0	0	0	0	0	3	1	0	0	0	0
1234	3	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0
1236	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1243	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
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1246	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1250	2	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0
1252	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
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1265	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1267	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0
1270	3	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0
1272	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1274	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1275	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
1286	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1288	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1291	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
1298	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1301	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1305	2	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0
1306	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1307	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1308	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1311	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1318	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1322	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1325	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1327	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1329	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
1330	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1332	2	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
1333	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
1334	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1337	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1339	4	0	0	1	0	0	0	0	3	0	0	1	1	3	0	0	0
1342	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1343	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
1345	2	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0	0
1346	2	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0
1347	2	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1352	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1353	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1354	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1357	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1360	3	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0
1361	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1364	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1365	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1366	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1367	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1368	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1371	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1375	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1379	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1380	3	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
1381	3	0	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0
1383	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1385	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1388	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
1389	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1392	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1395	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
1396	4	0	0	2	0	0	0	0	2	0	0	1	0	4	0	0	0
1397	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1401	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
1403	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1404	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1406	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1407	3	2	2	0	2	0	0	0	0	0	0	1	0	0	0	0	0
1408	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1412	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1414	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1418	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
1419	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
1420	4	0	0	2	0	0	0	0	0	1	0	1	0	2	0	0	0
1421	2	0	0	1	0	0	1	0	0	0	0	1	1	1	0	0	0
1423	3	0	0	0	0	0	0	2	2	0	0	1	0	3	0	0	0
1425	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1426	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
1431	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1432	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1433	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1437	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1439	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0
1447	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1448	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1453	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1461	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
1464	2	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0
1466	2	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
1468	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1471	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1473	2	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0
1475	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1479	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1482	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1488	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
1489	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1490	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
1491	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0
1493	2	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
1494	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1498	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1499	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1501	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1502	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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1504	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0
1505	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1508	1	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	0
1509	4	1	1	2	0	1	0	1	2	0	0	1	0	0	0	0	0
1510	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1511	4	1	1	2	0	0	0	1	1	0	0	1	0	1	0	0	0
1512	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1514	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1517	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1525	2	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0
1528	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1531	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1534	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1538	2	1	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0
1539	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1540	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
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1542	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1543	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1549	2	2	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0
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1551	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
1554	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1556	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1559	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1560	3	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0
1562	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1566	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1570	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1574	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1575	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1578	2	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0
1580	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
1582	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1583	3	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0
1584	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1587	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1588	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1590	3	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0
1591	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
1592	2	1	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0
1593	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1594	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1595	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1597	2	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
1599	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1602	3	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0
1603	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1604	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1606	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1607	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1609	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1615	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1617	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1622	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1624	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1626	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1630	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1633	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
1635	2	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1636	2	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0
1637	4	3	1	1	1	0	0	1	0	0	0	1	1	1	0	0	0
1639	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1641	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1642	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1643	2	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
1645	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1646	2	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0
1653	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1656	1	0	0	0	0	0	0	0	0	0	0	1	0	1	[illegible]	0	0
1657	3	1	1	1	0	0	0	1	0	0	0	1	0	1	1	0	0
1658	1	0	0	1	0	0	[illegible]	0	1	0	0	0	0	1	0	0	0
1659	1	0	0	0	0	0	[illegible]	0	1	0	0	0	0	1	0	0	0
1660	4	0	0	1	0	0	0	0	3	1	0	1	1	1	0	0	0
1661	2	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0
1665	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
1669	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1670	4	0	0	1	0	0	0	2	2	0	0	1	0	3	0	0	0
1672	2	2	2	0	0	0	0	0	0	0	0	1	0	1	2	0	0
1673	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1674	1	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0
1678	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1685	4	0	0	1	0	0	0	0	4	0	0	0	0	4	0	0	0
1686	3	0	0	0	0	0	1	0	1	1	0	1	0	1	0	0	0
1689	2	0	0	0	0	0	1	1	2	0	0	0	1	1	0	0	0
1690	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1691	3	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0
1694	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
1697	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1699	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1700	2	0	0	0	0	1	0	0	0	0	0	1	0	1	1	0	0
1708	2	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
1709	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1710	2	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0
1714	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
1717	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1722	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0
1726	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1734	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1739	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1741	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1742	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1743	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
1745	2	1	1	0	0	0	0	1	1	1	0	1	1	0	1	0	0
1747	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1749	2	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1751	2	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
1753	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1755	4	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	1
1757	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1758	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1762	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1766	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1767	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1768	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1770	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1776	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
1778	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1780	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
1782	4	0	0	0	0	0	0	2	3	1	0	0	0	2	0	0	0
1783	4	0	0	2	0	0	0	0	2	0	0	0	0	3	0	0	0
1784	3	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0
1786	3	0	0	1	0	0	0	0	2	1	0	0	1	1	0	0	0
1787	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1791	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1794	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1803	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1805	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1808	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
1811	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1812	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1813	2	0	0	1	0	0	1	0	0	0	0	0	1	1	0	0	0
1815	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
1816	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1817	3	2	2	1	3	0	0	0	0	0	0	0	0	1	0	0	0
1821	2	2	2	0	0	0	0	1	0	0	0	2	0	0	1	0	0
1823	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1825	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1826	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1827	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
1832	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1835	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1840	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1841	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1842	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1843	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1846	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1847	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
1851	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1852	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1859	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
1861	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1862	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
1867	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1874	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1875	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1881	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
188[illegible]	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1884	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
1886	2	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0
1888	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1889	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0
1890	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1891	2	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0
1893	2	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
1896	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1897	2	0	0	0	0	0	0	1	1	0	0	1	0	1	1	0	0
1899	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1903	4	0	0	1	0	0	0	2	0	0	0	2	1	3	0	0	0
1907	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1909	3	0	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0
1916	2	0	0	0	0	0	0	2	2	0	0	0	0	1	2	0	0
1918	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1923	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1924	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1926	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1934	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1937	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
1939	3	0	0	1	0	0	0	0	1	0	0	1	0	2	0	0	0
1941	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1945	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1946	4	2	2	2	0	0	1	2	0	0	0	0	0	1	1	0	0
1951	3	0	0	1	1	0	0	0	1	0	0	0	0	2	0	0	0
1953	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1958	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
1960	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1961	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1967	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1970	3	1	1	1	1	0	0	0	2	0	0	0	0	1	0	0	0
1975	3	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
1977	2	2	1	0	0	0	0	1	0	0	0	1	0	0	2	0	0
1980	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
1986	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1987	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
1993	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1994	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1999	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2003	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2006	2	2	2	0	0	0	0	1	0	0	0	0	0	0	2	0	0
2007	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2008	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
2009	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2013	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2015	3	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0
2016	2	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0
2022	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
2023	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
2029	2	2	2	0	0	0	0	1	0	0	0	2	0	0	2	0	0
2032	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
2041	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2043	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2044	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2045	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2046	2	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0
2047	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0
2050	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2053	3	0	0	0	0	0	0	1	3	0	0	0	0	2	0	0	0
2054	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
2056	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2057	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2058	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
2066	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2067	2	2	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0
2074	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
2076	2	0	0	0	0	0	0	1	2	0	0	0	0	2	1	0	0
2082	2	0	0	1	0	0	0	0	2	0	0	0	1	2	0	0	0
2083	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2089	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2091	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2093	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
2097	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2103	3	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
2107	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
2111	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2115	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2118	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
2123	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2125	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2128	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2132	2	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0
2133	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2135	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
2138	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2140	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2142	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2146	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2151	2	0	0	1	0	0	0	1	1	1	0	0	0	2	0	0	0
2152	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
2154	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
2155	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
2158	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2159	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2160	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2163	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2164	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2165	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2166	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2167	4	0	0	0	0	0	0	2	3	1	0	0	0	2	0	0	0
2168	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2170	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2171	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2172	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2173	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
2174	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2184	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
2185	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2187	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2188	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
2189	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2190	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2191	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
2192	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2197	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2201	2	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	0
2203	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2205	2	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0
2207	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2210	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2211	2	0	0	1	0	0	0	1	1	0	0	0	0	1	2	0	0
2214	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2216	4	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0
2218	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2224	2	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0
2225	3	1	1	0	0	0	1	1	2	0	0	1	0	2	1	0	0
2228	3	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0	0
2232	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2235	3	0	0	2	0	0	1	0	0	0	0	0	1	1	0	0	0
2237	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2238	2	0	0	0	2	0	1	0	0	0	0	0	0	1	0	0	0
2240	4	0	0	4	0	0	0	0	2	0	0	0	0	1	0	0	0
2241	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2244	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2246	3	0	0	3	0	0	0	0	2	0	0	0	0	1	0	0	0
2249	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
2255	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2257	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2258	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2260	2	0	0	1	0	0	0	0	0	0	0	2	0	1	0	0	0
2266	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2267	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2269	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
2271	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2273	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2275	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
2276	3	2	2	0	0	0	0	0	1	1	0	0	0	1	0	0	0
2277	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2279	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2284	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
2286	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2288	2	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
2294	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0
2297	2	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
2300	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2301	2	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0
2302	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2303	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2306	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
2308	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2310	2	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0
2312	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2313	2	0	0	0	0	0	0	2	1	0	0	0	0	2	0	0	0
2317	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2318	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2320	4	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0
2321	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
2322	2	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0
2324	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2325	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2327	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2328	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
2331	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
2332	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2335	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2342	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2343	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2344	2	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0
2345	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2346	2	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
2347	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2349	3	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0
2351	2	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0
2354	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
2355	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2356	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2359	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
2364	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2367	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2370	2	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0
2372	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
2373	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2374	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2376	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
2379	2	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	0
2382	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
2390	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
2392	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
2394	1	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0
2395	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2400	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2402	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2404	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2407	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0
2413	2	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0
2414	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2416	4	0	0	0	0	0	1	2	2	0	0	1	0	3	0	0	0
2417	3	3	3	0	0	0	0	0	0	0	0	3	1	1	3	0	0
2421	3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0
2422	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2428	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2430	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
2432	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2433	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2434	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2437	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2439	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2441	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2442	1	1	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0
2443	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2455	2	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
2458	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2459	4	0	0	2	0	0	0	1	1	0	0	0	0	1	0	0	0
2460	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2463	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
2465	4	1	0	2	0	0	0	1	1	0	0	2	0	2	0	0	0
2468	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
2474	2	2	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2475	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2476	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2483	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2485	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2487	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2492	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2500	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2501	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2502	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2505	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2517	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2520	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
2521	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2522	1	1	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0
2523	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2524	4	3	0	1	0	0	0	0	1	0	0	0	0	3	0	0	0
2525	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2529	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2531	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2533	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2534	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2538	2	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	0
2539	1	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0
2544	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
2546	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2549	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2551	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2553	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2558	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2560	3	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
2561	2	0	0	0	0	0	0	2	1	0	0	1	0	2	1	0	0
2564	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0
2567	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
2574	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2575	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2582	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2584	3	0	0	2	0	0	0	0	1	0	0	1	0	1	0	0	0
2587	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2588	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2592	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2600	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2604	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2611	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2615	2	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0
2616	2	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0
2617	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2621	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
2623	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2626	2	0	0	1	0	0	0	0	2	0	0	0	0	1	0	0	0
2633	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2636	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2637	3	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
2638	3	2	2	1	0	0	0	1	1	0	0	2	0	1	2	0	0
2641	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2645	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2646	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2649	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2653	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2655	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2657	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2658	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2662	4	0	0	1	0	0	0	1	2	0	0	1	0	2	0	0	0
2666	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
2670	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2677	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2683	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
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2687	2	2	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2688	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
2690	3	0	0	1	0	0	0	0	1	0	0	1	0	2	0	0	0
2692	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2693	1	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0
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2696	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2698	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
2699	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2702	2	2	2	0	0	0	0	1	0	0	0	2	1	0	1	0	0
2707	2	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0
2711	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
2715	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
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2721	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
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2729	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
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2740	2	0	0	1	0	0	0	0	2	0	0	0	0	1	0	0	0
2742	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
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IMPS Reject Catalog

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2775	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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2791	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
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2806	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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2870	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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2880	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
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2883	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
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2892	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
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2897	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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2907	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2908	1	0	0	0	0	0	0	1	[illegible]	[illegible]	0	0	0	0	0	0	0
2920	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
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2935	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
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2962	4	0	0	1	0	0	0	0	3	1	0	0	0	2	0	0	0
2963	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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2965	2	1	1	0	1	0	0	1	0	0	0	2	0	1	1	0	0
2967	2	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2970	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2973	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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2979	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
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2986	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
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2989	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
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2993	3	1	1	2	1	0	0	1	2	0	0	0	0	2	0	0	0
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2995	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3000	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3001	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
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3005	1	1	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0
3010	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
3011	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
3017	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3020	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3024	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
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3028	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
3035	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
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3045	3	1	1	1	1	0	0	0	2	1	0	0	0	0	0	0	0
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3062	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
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3071	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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3092	2	0	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0
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3095	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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3115	2	2	2	1	2	0	0	0	0	0	0	1	0	1	0	0	0
3118	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3120	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3122	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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3129	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3132	4	3	3	2	0	0	0	0	1	0	0	2	0	0	2	0	0
3139	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
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IMPS Reject Catalog

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3166	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
3167	2	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0
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3259	3	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0
3264	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3269	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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3275	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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3283	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
3285	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3289	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
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3292	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3298	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	1
3300	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3305	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3310	3	0	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0
3311	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
3312	4	0	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0
3316	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3317	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
3324	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
3325	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3331	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3333	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3335	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
3336	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3342	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3346	5	0	0	3	2	0	0	2	0	0	0	0	0	1	0	0	0
3353	4	1	0	2	0	0	0	1	2	0	0	1	0	2	0	0	0
3357	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3367	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3369	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3372	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3373	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
3379	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
3380	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
3382	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
3387	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
3389	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3391	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3394	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3396	2	1	1	1	1	0	1	0	0	0	0	0	1	0	0	0	0
3397	2	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0
3398	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
3399	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
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3403	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3406	2	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
3407	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
3412	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3415	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3416	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3418	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3419	2	2	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0
3423	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3425	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
3426	3	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0
3428	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
3429	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0
3431	2	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0
3438	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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3443	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
3446	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
3447	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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3452	1	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0
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3463	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
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3466	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
3467	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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3470	4	0	0	1	0	0	0	0	1	0	0	2	0	2	0	0	0
3471	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
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IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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3482	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3485	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
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3504	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3513	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
3525	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3529	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3530	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3534	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3536	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
3538	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
3541	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
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3549	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3553	2	0	0	0	0	0	0	1	1	1	0	1	0	1	0	0	0
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3559	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
3561	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
3564	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
3565	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
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3571	2	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0
3582	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
3594	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
3596	4	0	0	1	2	0	0	0	2	1	0	0	0	0	0	0	0
3598	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3599	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
3604	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3606	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3608	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3614	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3620	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3621	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3622	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3625	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
3626	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3628	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3631	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
3633	2	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0
3640	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3641	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
3643	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
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3645	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3648	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3649	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3660	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3661	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3666	3	1	0	1	0	0	0	0	2	0	0	1	0	0	0	0	1
3667	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3670	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3671	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
3674	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3675	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3678	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	0
3681	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3683	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
3686	2	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0
3693	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3694	3	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0
3696	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3704	2	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	0
3706	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
3708	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3709	2	0	0	0	1	0	0	0	0	0	0	1	0	1	1	0	0
3713	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3715	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3716	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3717	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3723	2	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0
3724	2	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0
3725	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
3726	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3727	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0
3728	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3729	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3730	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
3731	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0
3732	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3735	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3737	2	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
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3740	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3744	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3746	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
3751	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
3753	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0
3754	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
3761	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3766	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
3767	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3772	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
3775	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3776	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3779	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3780	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3781	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3784	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3787	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3793	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0
3795	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3796	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3799	5	0	0	4	0	0	0	1	1	0	0	0	0	3	0	0	0
3801	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3803	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
3805	2	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0
3806	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3812	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3813	2	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0
3815	3	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0
3818	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0

IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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3821	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
3823	2	0	0	0	0	0	0	1	1	0	0	1	0	1	1	0	0
3827	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3828	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3829	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3834	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3840	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
3841	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3843	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3845	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3846	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
3847	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3851	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3855	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3858	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
3863	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3872	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3873	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
3874	3	0	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0
3876	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
3879	2	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	0
3884	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
3886	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3888	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0
3889	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3895	3	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	0
3898	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3899	2	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
3901	2	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0
3902	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3905	1	1	1	1	0	0	0	1	0	0	0	1	0	0	1	0	0
3910	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3911	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3913	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3915	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3916	3	0	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0
3923	3	0	0	0	0	0	0	0	2	0	0	0	0	3	0	0	0
3932	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3935	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3937	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3947	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3953	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3955	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3961	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3963	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
3966	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3971	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3974	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
3976	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
3977	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
3979	3	0	0	1	0	0	0	0	1	0	0	1	0	2	0	0	0
3982	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
3983	2	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
3989	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
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3993	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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3996	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
3997	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
3998	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
3999	3	0	0	1	0	0	0	2	2	0	0	0	0	2	0	0	0
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4009	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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4024	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4031	2	1	1	0	0	0	0	1	1	0	0	1	0	1	0	0	0
4033	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4035	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0
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4054	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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4057	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
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4068	2	1	1	0	1	0	0	1	1	0	0	1	0	1	1	0	0
4079	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
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4102	3	0	0	1	0	0	0	0	3	1	0	0	0	2	0	0	0
4103	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4107	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
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4110	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4112	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4118	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
4124	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
4131	3	0	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0
4132	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
4133	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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4141	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4143	2	2	2	0	0	0	0	1	0	0	0	2	0	1	2	0	0
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4159	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4160	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
4163	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4164	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
4166	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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4176	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0
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4178	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
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4187	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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4194	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
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4203	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0
4207	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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4220	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4221	2	2	0	0	0	0	0	0	0	0	0	2	1	0	2	0	0
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4224	2	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0
4225	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4232	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
4233	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4237	2	0	0	0	0	0	0	1	1	1	0	0	0	2	0	0	0
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4273	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4279	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4280	1	0	0	0	1	0	0	1	1	0	0	0	0	1	0	0	0
4282	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
4284	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4290	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
4292	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4293	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4298	4	0	0	1	0	0	0	0	1	0	1	1	1	1	0	0	0
4301	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4307	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4308	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4310	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4312	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4314	2	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0
4315	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0
4317	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
4321	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4323	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4333	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4334	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4335	2	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
4339	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4340	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4342	2	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0
4347	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4349	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4352	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4354	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4356	3	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0
4357	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4363	2	0	0	0	1	0	0	1	2	1	0	0	0	1	0	0	0
4367	2	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
4371	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4379	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
4380	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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4386	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4389	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
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4395	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4399	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0
4404	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
4406	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4408	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4410	2	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0
4414	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4415	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4419	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4420	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4431	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4435	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4436	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
4437	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4442	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
4444	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4448	2	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0
4455	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4457	3	0	0	0	0	0	0	1	2	0	1	0	0	3	0	0	0
4458	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4461	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4466	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
4467	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4468	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4471	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4472	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4474	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4480	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4482	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4483	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
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4485	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4488	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
4489	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
4490	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4491	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
4492	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
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4494	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
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4511	2	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0
4513	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4514	1	1	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0
4515	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
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IMPS Reject Catalog

ID/1	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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4530	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
4531	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0
4532	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4534	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
4537	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4538	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
4542	2	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0
4543	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4551	4	0	0	2	0	0	0	0	2	1	0	0	0	1	0	0	0
4554	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4555	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4559	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4563	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
4565	2	1	1	0	1	0	0	1	1	0	0	1	0	2	1	0	0
4568	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4570	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4573	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4576	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
4579	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4581	3	0	0	1	0	0	0	2	2	0	0	0	0	2	1	0	0
4584	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4589	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4593	2	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0
4595	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4604	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
4609	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
4613	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4614	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4621	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4624	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4626	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4627	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4629	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4632	2	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
4633	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
4634	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4638	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
4640	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4641	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4645	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4646	1	1	1	1	1	0	0	1	0	0	0	1	0	0	1	0	0
4648	2	0	0	0	0	0	1	1	2	0	0	0	1	1	0	0	0
4650	3	0	0	0	0	0	0	3	3	0	0	0	0	3	0	0	0
4657	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4659	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4662	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
4663	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4668	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
4669	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
4671	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
4672	2	2	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0

ID/1 R M P O F S I L B Z U C Q D A N E

IMPS Reject Catalog

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
3	2	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
7	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
8	1	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0
10	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
16	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
18	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
29	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
31	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
33	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
35	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
40	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
44	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
48	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
49	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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51	3	0	0	2	0	0	0	0	2	0	0	0	0	1	0	0	0
53	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
56	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
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62	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
70	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
73	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
85	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
86	1	0	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0
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98	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
114	3	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1
115	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
117	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
119	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
127	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
128	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
131	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
136	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
137	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
141	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
143	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
146	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
147	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
155	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
158	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
166	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
168	4	0	0	1	3	0	0	0	1	1	0	1	0	0	0	0	0
175	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
178	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
182	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
184	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
186	3	1	1	2	1	0	0	1	2	0	0	1	0	1	0	0	0
199	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
206	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
212	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
220	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
221	2	0	0	1	0	0	0	1	2	1	0	0	0	0	0	0	0
226	3	2	2	1	2	0	0	1	1	0	0	2	0	0	1	0	0
231	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
235	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
238	2	0	0	1	0	0	0	0	1	1	0	0	0	2	0	0	0
239	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
245	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
249	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
250	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0
251	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
257	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0
262	2	1	1	0	1	0	0	1	1	1	0	1	0	0	0	0	0
263	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
283	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
290	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
293	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
299	2	2	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0
300	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
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309	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
319	3	0	0	1	0	0	0	0	2	1	0	1	0	0	0	0	0
320	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
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326	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
329	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
334	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
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337	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
341	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
342	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
347	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
349	2	0	0	1	0	0	0	1	1	0	0	0	0	2	0	0	0
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353	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
354	2	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0
358	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
359	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
366	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
370	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
371	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
373	3	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
384	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
386	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
388	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
396	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
397	1	1	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0
400	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
404	2	0	0	1	0	0	0	1	1	0	0	1	0	2	1	0	0
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414	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
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420	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
432	2	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0
442	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
445	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
448	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
454	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
465	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
466	3	0	0	1	0	0	0	0	1	0	0	1	0	2	0	0	0
471	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
472	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
474	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
476	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
479	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
480	3	1	1	1	0	0	0	2	3	0	0	0	0	1	3	0	0

IMPS Reject Catalog

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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487	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
489	2	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0
490	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
491	2	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0
506	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
507	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
512	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
513	3	0	0	1	0	0	0	0	0	0	0	2	1	0	0	0	0
521	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
523	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0
536	2	0	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0
537	3	0	0	1	0	0	0	0	1	0	0	1	0	3	0	0	0
539	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
546	2	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
557	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
561	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
562	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
563	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
564	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
569	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
574	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
578	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
581	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
585	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
589	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
590	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
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595	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
601	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
603	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
606	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
613	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
614	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
617	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
620	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
621	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
631	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
634	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0
643	2	0	0	0	0	0	0	0	2	1	0	0	0	1	1	0	0
644	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
650	2	0	0	1	0	0	0	1	1	0	0	1	0	0	2	0	0
660	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
681	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
691	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
694	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
696	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
700	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
703	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
706	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
707	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
709	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
718	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
722	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
725	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
740	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
743	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
748	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
749	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
752	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
756	2	0	0	0	0	0	0	0	1	0	0	1	0	2	1	0	0
760	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
762	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
769	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
778	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
784	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
794	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
800	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
801	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
806	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
817	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
819	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
821	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0
832	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
849	2	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0
850	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
856	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
858	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
861	2	2	2	1	2	0	0	1	0	0	0	2	0	0	2	0	0
869	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
871	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
872	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0
873	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
883	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
884	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
887	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
889	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
903	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
904	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
909	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
910	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
911	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
923	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
927	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
931	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
933	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
940	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
948	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
960	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
961	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
962	2	0	0	0	0	0	0	1	1	0	0	1	0	2	1	0	0
969	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
970	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
973	1	1	1	0	1	0	0	1	0	0	0	1	0	0	1	0	0
980	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
986	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
989	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
991	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
995	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
996	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
1016	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
1023	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
1024	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1028	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1039	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
1040	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1044	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
1046	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1056	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1058	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0

IMPS Reject Catalog

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
1061	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1062	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1065	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1067	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1069	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1070	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1071	2	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1073	2	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
1076	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1079	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
1080	2	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1081	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1082	1	1	1	0	1	0	0	1	0	0	0	1	0	1	1	0	0
1084	2	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0
1089	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1094	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1095	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1097	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1098	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1106	3	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0
1107	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1108	2	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1
1109	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1111	2	0	0	1	0	0	0	1	2	0	0	0	0	2	0	0	0
1113	2	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0
1114	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1120	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1125	2	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
1126	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1128	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1142	2	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
1149	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1151	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
1153	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1159	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1161	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1162	1	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
1165	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1166	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1168	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0
1171	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1172	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1173	1	1	1	1	0	0	0	1	0	0	0	0	1	0	0	0
1174	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1176	2	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0
1179	3	2	2	0	2	0	0	0	1	0	0	1	0	2	2	0	0
1180	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1182	1	1	1	0	1	0	0	1	0	0	0	1	0	0	1	0	0
1183	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1184	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0
1185	2	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0
1188	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
1189	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1193	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1194	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1199	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1201	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1203	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1205	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1206	2	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0
1209	2	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1219	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1229	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1230	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1234	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1236	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
1237	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1240	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1242	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
1244	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
1253	2	0	0	0	0	0	2	1	0	0	0	0	2	0	0	0
1260	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1265	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1268	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1269	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1273	3	0	0	0	0	0	1	2	0	0	0	0	2	1	0	0
1282	1	1	1	0	0	1	0	0	0	0	1	1	1	1	0	0
1293	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1298	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
1301	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1308	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1310	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1311	2	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
1313	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1317	2	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0
1320	2	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1321	2	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0
1322	2	2	2	0	0	0	0	0	0	0	1	0	0	2	0	0
1323	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1326	2	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0
1328	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1330	2	0	0	0	0	0	2	1	0	0	0	0	2	0	0	0
1336	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
1337	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1339	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1347	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1355	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1364	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1370	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1372	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1373	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1376	2	0	0	0	0	0	1	1	0	0	1	0	2	0	0	0
1387	3	0	0	0	0	0	2	0	0	0	1	0	1	0	0	0
1396	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1401	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1402	2	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0
1404	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1409	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1416	2	0	0	0	0	0	2	1	0	0	0	0	2	0	0	0
1421	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0
1426	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1429	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1431	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1432	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1444	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
1451	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1452	2	2	2	0	0	0	0	1	0	0	0	2	1	0	2	0	0
1454	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1457	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1461	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0

IMPS Reject Catalog

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
1462	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1463	2	0	0	0	0	0	0	0	2	1	0	0	0	1	0	0	0
1465	2	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0
1470	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0
1471	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
1473	2	2	2	0	2	0	0	1	0	0	0	2	0	0	2	0	0
1474	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1475	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1476	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1488	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1489	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
1493	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1496	2	0	0	1	0	0	0	2	1	0	0	0	0	2	0	0	0
1497	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1498	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
1506	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1509	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1511	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1513	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1516	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1517	2	2	2	0	0	0	0	1	0	0	0	0	0	0	2	0	0
1528	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1534	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1539	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1542	4	2	2	1	0	0	0	1	2	0	0	2	0	0	3	0	0
1543	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1558	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1559	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1565	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1573	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1586	2	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0
1587	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
1590	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1591	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1592	1	1	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0
1596	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1601	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
1607	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1612	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1618	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1619	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
1621	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
1623	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1629	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1631	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1634	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1636	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1637	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1638	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1642	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1650	2	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0
1651	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
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1666	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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1700	3	0	0	0	0	0	0	1	3	0	0	0	1	2	0	0	0
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1727	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
1730	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
1735	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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1752	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
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1779	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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1799	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1803	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
1805	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
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1811	3	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0
1812	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0
1818	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1820	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1827	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
1830	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0
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1832	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
1836	3	0	0	0	0	0	0	0	1	0	0	2	0	2	0	0	0
1844	2	0	0	0	0	0	0	1	2	1	0	0	0	0	1	0	0
1858	2	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	0
1859	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1864	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1865	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
1867	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
1868	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
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1873	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
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1875	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1877	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
1886	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
1890	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1897	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0
1902	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0

IMPS Reject Catalog

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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1916	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1920	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
1921	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1923	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1925	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
1927	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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1935	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
1938	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1941	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
1943	1	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0
1945	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1946	2	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0
1952	2	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0
1953	2	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0
1954	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
1955	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1973	2	0	0	0	0	0	0	1	2	1	0	0	0	1	0	0	0
1975	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
1979	1	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0
1991	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
1993	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
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1996	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2000	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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2003	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2004	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2005	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2011	2	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0
2012	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2016	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
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2031	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
2033	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2034	2	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0
2041	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2043	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
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2045	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
2046	2	2	2	0	0	0	0	1	0	0	0	0	0	0	2	0	0
2053	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2059	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2061	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2062	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2068	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2072	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2087	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
2088	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2089	3	1	1	0	1	0	0	0	1	0	0	0	0	3	0	0	0
2091	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2094	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2097	5	0	0	3	0	0	0	1	3	1	0	0	0	1	0	0	0
2098	2	0	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0
2099	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
2111	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
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2114	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2120	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
2121	2	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0
2128	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2130	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2134	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2143	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2145	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2151	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2158	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
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2162	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
2175	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2177	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2185	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
2187	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2199	2	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
2201	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
2205	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2213	2	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0
2223	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2246	2	0	0	0	1	0	0	0	2	0	0	0	0	2	1	0	0
2251	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2254	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2264	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2267	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2268	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
2271	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
2279	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2282	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
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2287	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2296	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0
2307	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2311	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2313	1	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0
2318	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2320	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
2326	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
2328	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
2331	1	1	1	0	0	0	0	1	1	0	0	0	0	1	1	0	0
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2342	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2346	2	0	0	0	0	0	0	2	2	0	0	0	0	2	0	0	0
2360	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2365	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2366	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2369	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
2376	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
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2392	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
2393	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2394	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0
2395	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
2396	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
2399	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2401	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2403	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
2412	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0

ID/2	R	M	P	O	F	S	I	L	B	Z	U	C	Q	D	A	N	E
2415	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
2416	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2417	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
2420	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2421	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
2430	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2436	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
2441	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0
2445	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
2455	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
2457	2	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0
2459	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2461	2	0	0	0	0	0	0	2	2	0	0	0	0	2	2	0	0
2462	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2465	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2468	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
2470	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2471	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
2478	1	1	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0
2479	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2485	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2496	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0
2498	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
2499	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2507	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2509	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2510	2	2	2	0	2	0	0	2	0	0	0	2	0	1	2	0	0
2511	2	1	1	0	0	0	0	2	1	0	0	1		0	1	0	0
2521	2	2	2	0	0	0	0	0	0	0	0	1	0	0	2	0	0
2524	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2527	2	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0
2528	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2531	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2537	2	1	1	0	0	0	0	1	1	0	0	0	0	2	2	0	0
2541	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2550	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2553	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2555	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
2559	2	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0
2570	1	0	0	0	0	0	0	1	0	0	0	1	0	1	1	0	0
2571	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2579	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
2581	2	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
2584	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
2585	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
2587	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
2590	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
2603	2	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0
2604	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0
2609	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
2612	1	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
2619	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
2620	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2624	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
2630	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0

ID/2 R M P O F S I L B Z U C Q D A N E

Chapter 16

IMPS MISSED-PREDICTIONS CATALOG (FP 106)

Glenn J. Veeder, Edward F. Tedesco, and John W. Fowler

This catalog presents a summary of the those asteroids which were predicted to pass across the IRAS focal plane during survey mode but which generated no accepted associations. The entries are collated by predicted asteroid in ascending numerical order for ID Types 1 and 2. Entries include the asteroid number and the number of times it was predicted to be scanned but was missed. Also given is the derived greatest lower limit on the albedo and least upper limit on the diameter for each asteroid, plus the analogous OR'd AStatW status word, MPStatW. There is an entry for each of 1,653 numbered asteroids and 1,765 ID Type-2 asteroids which were scanned but did not generate any IMPS asteroid associations.

The format of the machine-readable !MPS Missed-Predictions file is given in Table 17, page 159. Table 26 explicates the parameters prese. ted in this data product.

This catalog presents parameters for all missed asteroid sightings in IMPS, *i.e.*, for all those in the IMPS Statistics Catalog (FP 104) with M greater than zero.

Table 26. IMPS Missed-Predictions Catalog

Parameter	Meaning
NM	The number of predicted sightings not realized.
AlbGLB	The greatest lower bound geometric albedo.
DiamLUB	The least upper bound diameter (in km).
MPStatW	The 16-bit Missed Prediction Status Word. (See Table 27, below, for explication.)

16.1 IRAS Minor Planet Survey Missed-Prediction Status Word

Table 27. IMPS Missed-Prediction Status Word (MPStatW)

Bit	Meaning	Total ID 1&2	No. of OR'ed set
1	An IMPS asteroid association exists.	0	0
2	IMPS accepted sighting	0	0
3	Low galactic latitude ($\lvert\beta\rvert < 10°$)	3779	996
4	Galactic center match	376	120
5	Dead 25 μm detector	8328	4625
6	Noisy 25 μm detector	9954	4806
7	Albedo not converged	79	32
8	Predicted flux < 0.14 Jy	208	40
9	Some sighting accepted	4471	1266
10	Some sighting rejected	9007	1946
11	SOP = 599 or 600	111	68
12	Predicted sighting conflict	18	17
13	All predictions in last SOPs	39	24
14	Disconnected association	6	6
15	IMPS asteroid prediction	26618	5746
16	Spare bit (always zero)	0	0

Notes to Table 27:

1. Set if this prediction was associated with a sighting. Since this product is a tabulation of predictions for which there were no associations none have this bit set.

2. Set if the sighting associated with this prediction (if it exists) was accepted. As with bit 1, since this product is a tabulation of missed predictions none have this bit set.

3. Set if sighting was within the galactic plane, *i.e.*, not included in the IRAS Faint Source Survey (*cf.*, AStatW bit number 17).

4. Asteroid 25 μm only sightings were rejected by IMPS if they were near the galactic center: ±3° latitude by ±10° longitude (subset of AStatW bit number 21).

7. Albedo iteration did not converge for this particular missed prediction.

8. Set *a priori* for all candidate associations of an IMPS asteroid if no predicted flux density at 25 μm was greater than 0.14 Jy.

9. Set if any accepted (associated) sighting existed.

10. Set if any rejected (associated) sighting existed.

11. Through an oversight, ADAS asteroid processing was off for the last two SOP's. Hence, the input data file used by IMPS contained no potential asteroid sightings from SOPs 599 or 600.

12. This ambiguity is not resolvable by IMPS (*cf.*, AStatW bit number 31).

13. ADAS asteroid processing was off for the last two SOP's. (See note for bit 11.)

14. Prediction was matched but later disconnected.

15. Set to unity for every asteroid prediction processed by IMPS.

16. Unset (zeroed) for every asteroid prediction processed by IMPS

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW 1111111 1234567890123456
24	2	0.7000	60.96	........111...1.
262	6	0.0449	29.06	..1.....11......
296	6	0.0746	14.57	........11......
315	5	0.0264	18.73	........11......
318	1	0.2264	36.83	.........1....1.
320	4	0.0680	36.92	........11......
363	2	0.4310	31.94	........11....1.
375	2	0.7000	50.94	........111.....
421	4	0.0325	32.47	........11......
422	3	0.2257	19.09	........11......
440	4	0.1088	20.19	........11......
457	4	0.0920	27.65	.........1......
473	4	0.0517	20.27	..1.....11......
475	6	0.0189	40.68	........1.......
548	2	0.1265	20.92	.........1......
553	7	0.0542	20.74	..1.....11......
557	2	0.0623	23.25	..............1.
587	7	0.0686	18.42	..1.....11......
610	3	0.0214	34.55	........11......
620	3	0.0712	27.63	........1.....1.
624	1	0.2228	89.47	.........1....1.
632	2	0.0396	31.99	..1.....11......
641	2	0.0719	18.85	....
646	4	0.0303	24.13	..1.....1.......
647	8	0.1094	21.00	........11......
650	2	0.0156	27.61	........11......
682	4	0.0736	17.79	.........1......
687	4	0.0290	35.54	........1.......
699	2	0.0345	32.43	........1.......
703	13	).0704	19.05	........11......
711	4	0.0571	23.20	........11......
722	6	0.0579	21.00	........11......
745	4	0.1185	33.63	........11......
749	7	0.0906	19.10	........11......
761	6	0.0883	30.53	........11......
763	8	0.0627	16.79	..1.....11......
802	9	0.0738	14.77	........11......
809	7	0.0595	23.79	........11......
810	2	0.0781	13.71	..1.............
812	7	0.0488	30.14	........11......
819	3	0.0667	21.45	........11......
827	4	0.0169	23.44	........11......
832	6	0.0707	29.02	..11....11.....
836	6	0.0127	22.51	.........1......
837	2	0.0938	18.95	........11......
843	5	0.0106	24.61	..1.....11......
854	2	0.0523	22.10	.........1......
855	2	0.0549	24.77	..1.....11......
870	5	0.0300	29.19	........11......
881	3	0.0378	32.71	.........1......
883	5	0.0372	20.92	........11......
887	6	0.0033	40.95	..1.....11......
898	16	0.0206	36.90	........11......
902	5	0.0820	16.09	........11......
906	2	0.2611	32.75	....
913	4	0.0575	23.10	..1.....1.......
915	10	0.0764	21.98	........11......
922	5	0.0308	34.62	........11......
929	5	0.0619	20.31	........1.......
939	4	0.0543	21.29	........11......
941	4	0.0321	36.31	........11......
944	12	0.0013	290.76	..1.....11......
948	2	0.0773	26.27	........11......
951	3	0.1734	16.29	........11......
960	5	0.0292	20.46	........11......
962	5	0.0378	33.96	.........1......
964	11	0.0559	37.16	........11......
970	3	0.0448	19.86	........11......
985	4	0.0189	27.89	........11......
1026	2	0.0172	22.20	.........1......
1037	4	0.0125	22.69	........11......
1047	6	0.0565	23.74	........11......
1055	5	0.1435	13.97	..1.....11.....
1060	3	0.0238	24.84	........11......
1061	4	0.0119	46.54	........11......
1065	4	0.0117	28.18	........11......
1067	12	0.0565	35.45	........11......
1077	4	0.0395	24.28	........1.......
1083	4	0.0512	23.39	........11......
1090	11	0.0406	20.95	........11......
1100	2	0.0936	27.41	..1.............
1103	3	0.0909	15.64	..1.....11.....
1106	4	0.0620	21.25	........11......
1117	4	0.0524	24.20	..1.....11.....
1120	6	0.0281	21.85	........11......
1131	2	0.0191	24.16	.........1......
1133	4	0.0468	22.11	....
1134	7	0.0071	21.74	..1.....11.....
1142	1	0.1060	35.55	..............1.
1147	7	0.0612	21.39	........11......
1160	2	0.1316	22.08	....
1169	4	0.0310	18.97	........11......
1192	8	0.0166	26.92	........11......
1193	8	0.0617	19.44	..11....11....
1204	2	0.0306	27.60	........1.......
1205	6	0.0209	17.54	..1.....11.....
1215	6	0.0736	28.99	........11......
1216	6	0.0412	13.13	....
1217	16	0.0916	13.89	..1.....11.....1
1220	3	0.0453	28.27	........11......
1221	4	0.0006	15.47	........11......
1225	5	0.0921	16.65	........11......
1228	3	0.0657	25.99	........11......
1235	12	0.0511	17.11	........11......
1273	7	0.0284	21.72	........11......
1278	2	0.0850	31.54	........1.......
1279	6	0.0273	25.34	........11......
1290	9	0.0297	24.41	........11......
1297	10	0.0838	31.77	..1.....11......
1299	6	0.0295	33.77	..1.....11......
1302	6	0.0569	42.27	..1.....11......
1313	4	0.0322	32.35	........11......
1316	7	0.0184	21.46	..1.....11......
1317	4	0.0871	46.95	.........1......
1319	6	0.0447	37.90	........11......
1324	6	0.0361	14.62	........11......
1335	5	0.0099	23.24	........11......
1338	6	0.0444	18.18	........11......
1344	4	0.0372	18.99	........11......
1348	3	0.1110	20.93	.........1......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
1349	1	0.1061	37.22	..1......1......
1355	8	0.0834	11.30	........11......
1363	7	0.0476	29.17	........11......
1370	2	0.0122	20.92	........1.......
1373	13	0.7000	1581.43	..1.....111.....
1374	2	0.0070	24.10	....
1376	4	0.0386	24.56	..1.....1.......
1377	13	0.0290	18.72	........11......
1382	2	0.0611	19.52	.........1......
1386	3	0.0350	21.44	..1.....11......
1387	2	0.0449	16.50	..1.............
1391	7	0.0424	24.87	........11......
1393	2	0.0456	22.60	........11......
1394	3	0.0387	21.38	..1......1......
1399	3	0.0162	18.15	.........1......
1400	1	0.0223	44.65	........1.......
1402	4	0.0135	28.70	........11......
1417	5	0.1148	27.14	........11......
1422	10	0.0382	14.07	........11......
1429	2	0.0182	31.15	........11......
1430	2	0.0276	22.04	..1.....11......
1440	2	0.0295	33.76	........11......
1442	4	0.0440	30.76	........11......
1443	4	0.0896	30.72	..1.....11......
1445	6	0.0178	42.64	........11......
1446	4	0.0464	17.80	........11......
1449	2	0.0414	21.63	........11......
1452	9	0.0217	35.89	........11......
1454	5	0.0605	14.89	..1.....11......
1455	10	0.0168	19.57	........11......
1457	2	0.1121	30.12	........1.......
1460	4	0.0183	23.59	........11......
1465	2	0.0290	37.35	....
1472	5	0.0250	24.24	........11......
1474	6	0.0054	53.38	........11......
1476	4	0.0206	24.33	........11......
1478	1	0.0496	17.78	..1.............
1483	8	0.0988	21.19	........11......
1485	7	0.0356	36.98	........11......
1486	10	0.0405	16.59	........11......
1496	6	0.0844	15.87	........11......
1497	2	0.0450	26.13	..1.....11......
1500	6	0.0324	18.04	........11......
1506	4	0.0331	33.39	..1......1......
1507	5	0.0340	18.96	........11......
1513	6	0.0253	18.03	........11......
1515	4	0.0187	29.36	........1.......
1518	7	0.0462	21.43	........11......
1521	4	0.0625	26.64	........11......
1522	5	0.0566	18.25	........11......
1523	9	0.0775	16.56	........11......
1526	2	0.0102	25.10	....
1527	2	0.0392	24.36	........11......
1536	5	0.0139	20.52	........11......
1543	6	0.0633	20.08	........11......
1547	2	0.1001	29.75	........11......
1553	2	0.0597	24.87	........1.......
1555	4	0.0249	38.52	........11......
1557	3	0.0560	30.88	........11......
1563	5	0.0235	18.96	........11......
1565	2	0.0195	32.98	........11......
1568	1	0.0446	23.93	........1.......
1577	4	0.0181	23.68	........11......
1589	8	0.0580	21.98	........11......
1601	7	0.0762	16.55	........11......
1610	7	0.0268	19.47	........11......
1611	7	0.0389	37.04	........11......
1619	4	0.0891	16.54	........11......
1625	2	0.0587	46.91	..1.............
1627	2	0.0243	19.54	.........1......
1634	2	0.0257	20.83	..1.....11......
1638	5	0.0419	32.54	........11......
1640	2	0.0135	27.41	........11......
1644	2	0.0486	26.07	........1.......
1647	6	0.0176	87.27	........11......
1648	2	0.0269	25.15	........11......
1649	7	0.0683	29.27	........11......
1652	3	0.0351	16.26	..1.....11......
1662	2	0.0920	24.08	.........1......
1664	6	0.0645	19.90	........1.......
1667	2	0.0490	22.82	........1.......
1668	2	0.0148	39.61	....
1671	5	0.0264	32.57	..11....11......
1676	6	0.0645	15.10	........11......
1681	5	0.0659	25.24	........11......
1682	2	0.0585	14.45	..1.....1.......
1683	2	0.0326	35.21	.........1......
1688	2	0.0149	34.45	....
1696	5	0.0519	15.35	........11......
1704	3	0.0237	18.89	........11......
1706	8	0.0832	12.69	........11......
1707	9	0.0608	16.73	........11......
1711	4	0.0494	37.57	........11......
1713	5	0.0148	23.89	........11......
1718	2	0.0088	28.19	.........1......
1725	8	0.0840	30.31	........11......
1727	11	0.0724	14.24	........11......
1728	5	0.1146	23.66	........11......
1729	3	0.0741	15.44	........11......
1730	2	0.0979	21.29	........11......
1736	9	0.0489	21.81	..1.....11......
1738	5	0.0602	18.78	........11......
1740	4	0.0187	21.84	..1.....11......
1744	11	0.0184	18.67	........11......
1748	2	0.0324	54.74	..1.....11......
1752	8	0.0261	18.84	........11......
1756	4	0.0315	27.19	........11......
1759	6	0.0071	37.07	........11......
1761	4	0.0330	38.37	.........1......
1763	2	0.0270	24.43	....
1769	2	0.0120	22.09	........11......
1772	2	0.0292	21.24	.........1......
1773	3	0.0839	19.13	........11......
1774	2	0.0318	23.56	..1.............
1775	2	0.0376	26.05	.........1......
1777	6	0.1245	22.70	..1.....11......
1781	7	0.0288	22.59	..11....11......
1785	1	0.0510	16.97	........1.......
1788	5	0.0201	39.10	........11......
1789	2	0.0372	17.30	..1.....1.......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
1792	4	0.0161	41.14	........11......
1793	2	0.0514	17.70	..1.....11......
1797	3	0.0798	16.32	..1.....11......
1798	6	0.1053	11.28	........11......
1800	2	0.0699	15.18	........11......
1802	5	0.0449	26.15	........11......
1804	1	0.0871	20.59	.........1......
1807	4	0.0447	23.90	........11......
1809	6	0.0236	32.87	........11......
1810	5	0.0674	17.76	.........1....1.
1814	9	0.0111	21.93	........11......
1818	10	0.0107	14.73	........11......
1820	3	0.0225	22.27	........11......
1822	3	0.0146	20.95	..1.....11......
1824	5	0.0600	28.49	........11......
1829	8	0.0700	15.89	........11......
1830	3	0.0620	17.27	........11......
1831	2	0.0298	21.21	..1.....11......
1833	3	0.0391	27.01	........1.......
1834	4	0.0448	31.48	........11......
1836	6	0.0432	35.15	..1.....11......
1837	5	0.0405	17.37	........11......
1839	4	0.0267	35.52	........11......
1844	3	0.0826	29.18	..1.....11......
1845	2	0.0726	27.11	....
1848	1	0.0903	29.22	..1......1......
1849	2	0.0478	29.10	........1.......
1850	9	0.0769	13.20	..1.....11......
1854	11	0.0293	26.92	..1.....11......
1855	2	0.0556	17.83	..1.....11......
1856	2	0.0402	20.01	........11......
1857	8	0.0482	20.99	........11......
1858	6	0.0578	27.72	..1.....11......
1860	4	0.0364	31.83	..1.....11......
1863	2	0.0007	38.04	..1.....11......
1864	4	0.0063	18.00	........11......
1865	4	0.0039	9.12	........11......
1869	6	0.0113	78.86	........11......
1870	4	0.0059	86.40	........11......
1871	4	0.0086	90.51	........11......
1872	4	0.0085	82.93	........11......
1877	2	0.0236	62.64	.........1......
1883	4	0.0376	16.44	....
1887	4	0.0599	29.84	..1.....11......
1892	3	0.1022	15.81	..1......1......
1894	4	0.0315	31.24	.........1......
1898	1	0.0290	32.52	........1.......
1900	6	0.0533	20.91	..11....1.......
1905	2	0.0175	20.03	........11......
1906	6	0.0690	14.60	........11......
1912	5	0.0439	33.30	........11......
1913	2	0.0501	29.77	....
1914	2	0.0385	22.44	..1.............
1915	4	0.0000	48.39	........11......
1920	7	0.0221	13.12	..1.....11......
1921	4	0.0011	54.13	.........1......
1922	4	0.0132	55.28	........11......
1925	7	0.1219	15.16	........11......
1928	4	0.0172	29.50	........11......
1929	8	0.0615	19.46	........11......
1931	4	0.0100	30.44	........11......
1933	4	0.0225	23.30	.........1......
1935	6	0.0318	18.71	..1.....11......
1943	3	0.0098	9.53	........11......
1944	3	0.0044	26.46	........11......
1948	6	0.1192	16.80	........11......
1949	5	0.0114	26.07	........11......
1954	2	0.0796	25.88	........11......
1955	2	0.0537	23.90	..1.....1.......
1957	2	0.0516	31.28	..1......1......
1959	9	0.0706	13.16	........11......
1962	8	0.0260	34.39	..11....11......
1965	5	0.0423	26.96	........11......
1966	7	0.0131	23.13	........11......
1968	7	0.1026	20.80	........11......
1971	4	0.0318	28.35	........11......
1972	2	0.0381	14.36	.........1......
1974	4	0.0240	35.74	........11......
1976	2	0.0159	21.06	........1.......
1978	4	0.0180	24.86	........11......
1981	3	0.0026	26.12	........11......
1982	3	0.0210	29.00	........11......
1983	6	0.0247	25.56	........11......
1988	10	0.0239	16.39	..11....11......
1990	6	0.0441	14.91	........11......
1991	6	0.0211	24.10	........11......
1992	15	0.0180	27.30	........11......
1996	3	0.0395	25.43	........11......
1998	4	0.0561	20.38	........11......
2004	2	0.0862	13.67	..1.............
2005	4	0.0602	19.67	..1.....1.......
2010	4	0.0212	43.29	.........1......
2011	6	0.0189	25.42	........11......
2014	5	0.0397	30.51	..1.....11......
2017	4	0.0277	22.21	.........1......
2018	2	0.0125	14.99	..1.....11......
2019	2	0.0535	23.95	........11......
2021	2	0.0113	27.31	.........1......
2024	6	0.0300	20.18	........11......
2026	3	0.0232	24.01	........11......
2027	5	0.0522	36.72	........11......
2028	2	0.7000	1581.43	..1.......1.....
2030	3	0.0181	19.71	..1.....11......
2031	3	0.0295	19.43	........11......
2033	4	0.0302	17.51	........11......
2034	2	0.0293	20.42	.........1......
2035	8	0.1653	9.83	..1.....11......
2036	6	0.1018	12.01	........11......
2037	12	0.0315	14.93	........11......
2042	5	0.0271	22.25	........11......
2048	4	0.0337	14.44	........11......
2049	4	0.0085	15.14	........11......
2051	4	0.0312	31.37	.........1......
2055	2	0.0098	26.79	........11......
2059	4	0.0006	38.02	........11......
2060	2	0.0095	858.91	.........1......
2061	4	0.0004	33.26	........11......
2065	6	0.0377	24.85	........11......
2070	3	0.0095	22.66	........11......
2071	5	0.0156	23.29	..1.....11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW	ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456					1111111 1234567890123456
2072	4	0.0221	26.90	........11......	2230	2	0.0424	22.38	........11......
2075	8	0.0179	18.95	........11......	2231	6	0.0329	24.28	..1.....11......
2077	4	0.0046	29.62	........11......	2234	3	0.0177	31.61	........11......
2078	4	0.0225	33.65	.........1......	2236	6	0.0361	24.27	........11......
2079	4	0.0340	20.80	........11......	2243	7	0.0247	23.28	..1.....11......
2080	5	0.0301	18.38	.........1......	2247	6	0.0162	17.35	........11......
2085	2	0.0859	23.80	........11......	2250	4	0.0362	35.02	........11......
2086	7	0.0601	17.95	........11......	2252	2	0.0471	25.53	........1.......
2088	8	0.0504	19.43	........11......	2253	4	0.0232	22.96	........11......
2090	4	0.0443	40.04	........11......	2254	4	0.0307	23.97	........11......
2092	4	0.0432	26.66	........11......	2256	2	0.0252	36.57	..1.............
2095	2	0.0296	25.57	........11......	2261	3	0.0305	20.97	.........1......
2096	4	0.0089	30.88	........11......	2262	2	0.0279	24.04	.........1......
2098	9	0.0556	17.82	..1.....11......	2268	3	0.0648	27.41	........11......
2099	6	0.0018	28.68	........11......	2270	4	0.0576	36.58	........11......
2101	4	0.0000	35.26	........11......	2272	3	0.0213	14.84	........11......
2106	4	0.0423	29.54	........11......	2274	6	0.0676	17.72	........11......
2109	4	0.0222	37.02	........11......	2278	6	0.0060	23.72	........11......
2110	6	0.0131	20.18	..1.....11......	2280	8	0.0194	19.03	........11......
2112	2	0.0588	15.09	........11......	2281	7	0.0229	15.98	........11......
2113	7	0.0207	21.44	..1.....11......	2283	5	0.0634	15.23	........11......
2117	8	0.0541	26.13	........11......	2287	6	0.0409	16.51	........11......
2119	6	0.0314	20.65	........11......	2289	2	0.0089	26.80	.........1......
2121	6	0.0463	21.43	........11......	2290	9	0.0214	33.01	........11......
2122	2	0.0526	22.04	........11......	2292	4	0.0415	29.83	........11......
2124	4	0.0307	34.70	........11......	2293	7	0.0745	32.17	........11......
2126	6	0.0337	23.96	........11......	2296	11	0.0292	42.72	........11......
2129	2	0.0403	12.05	..1.............	2298	2	0.0232	22.96	........1.......
2130	7	0.0137	22.66	........11......	2299	2	0.0273	17.62	..1.....11......
2134	7	0.0121	34.64	........11......	2305	5	0.0435	27.83	........11......
2136	4	0.0417	31.14	..1.....11......	2314	6	0.0450	17.27	........11......
2139	2	0.0164	28.61	.........1......	2316	5	0.0370	19.94	........11......
2141	9	0.0958	23.60	........11......	2319	4	0.0211	33.25	........11......
2143	8	0.2899	14.21	........11......	2329	4	0.0024	28.52	.........1......
2144	2	0.1299	23.27	.........1......	2334	9	0.0303	15.25	........11......
2148	6	0.0095	82.16	........11......	2336	4	0.0395	35.10	........11......
2149	2	0.0598	24.85	..1.....11......	2337	11	0.0311	30.00	........11......
2156	7	0.0255	24.11	........11......	2338	2	0.0344	29.86	........11......
2157	2	0.0493	31.41	........1.......	2339	6	0.0110	25.40	........11......
2161	4	0.0209	30.46	........11......	2350	5	0.0227	18.45	........11......
2162	8	0.0248	21.21	........11......	2353	7	0.0501	25.93	........11......
2175	6	0.0110	18.35	........11......	2358	2	0.0709	31.49	....
2176	3	0.0234	30.16	.........1......	2360	9	0.0321	24.58	........11......
2178	2	0.0245	17.73	........11......	2361	6	0.0248	38.56	........11......
2180	2	0.0698	31.75	..1......1......	2362	3	0.0239	15.64	........11......
2181	3	0.0384	25.78	........11......	2365	5	0.0524	26.53	........11......
2186	6	0.0542	19.81	........11......	2366	6	0.0383	11.80	.........1......
2194	10	0.0505	17.86	..1.....11......	2368	6	0.0424	5.86	........11......
2195	9	0.0374	20.77	........11......	2369	2	0.0492	26.15	..1.....11......
2198	7	0.0073	21.51	........11......	2371	2	0.0473	19.33	..1......1......
2199	2	0.0153	25.80	........11......	2377	4	0.0407	26.22	........11......
2200	4	0.0156	22.22	........11......	2380	3	0.0242	19.56	........11......
2206	6	0.0542	31.38	........11......	2383	2	0.0238	18.01	........11......
2212	2	0.0026	44.02	..1.....1.......	2384	6	0.0359	25.47	........11......
2213	7	0.0139	20.50	........11......	2385	2	0.0218	20.63	........1.......
2220	4	0.0407	43.54	........11......	2387	5	0.0608	29.63	........11......
2221	8	0.0210	25.28	........11......	2388	2	0.0196	24.96	..1......1......
2226	5	0.0415	31.23	........11......	2389	4	0.0129	30.83	........11......
2227	5	0.0310	13.11	..1.....11......	2396	6	0.0501	28.43	........11......
2229	4	0.0091	33.45	.........1......	2397	7	0.0431	42.28	..1.....11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
2399	4	0.0180	22.69	..1.....11......
2401	5	0.0285	28.60	..11....11......
2403	2	0.0646	16.54	.........1......
2406	3	0.0207	18.43	........11......
2409	2	0.0245	19.45	.........1......
2410	2	0.0356	17.70	....
2412	2	0.0294	30.85	........11......
2415	2	0.0443	25.14	........11......
2418	4	0.0200	29.74	........11....1.
2419	4	0.0157	20.23	........11......
2423	6	0.0389	15.44	........11......
2424	8	0.0239	22.60	........11......
2425	2	0.0761	29.03	....
2427	8	0.0121	33.24	........11......
2429	5	0.0389	24.47	........11......
2431	2	0.0238	23.71	..1......1......
2435	7	0.0272	8.44	........11......
2436	6	0.0225	33.68	........11......
2440	6	0.0218	21.60	........11......
2445	11	0.0894	11.69	........11......
2446	2	0.0183	25.86	........11......
2447	4	0.0112	31.48	........11......
2449	4	0.0143	15.63	........11......
2451	6	0.0312	28.60	........11......
2452	7	0.0221	37.31	........11......
2454	5	0.0140	22.40	..1.....11......
2457	6	0.0273	23.21	........11......
2462	2	0.0061	18.70	........11......
2467	2	0.0422	16.25	..1.....11......
2469	2	0.0396	31.96	.........1......
2470	4	0.0350	28.29	........11......
2471	4	0.0251	34.99	..1.....11......
2472	5	0.0426	15.44	........11......
2473	9	0.0190	22.07	..1.....11......
2477	5	0.0233	28.82	........11......
2479	9	0.0216	21.69	........1.......
2480	3	0.0443	17.39	........11......
2481	4	0.0048	33.33	........11......
2482	4	0.0255	24.01	........11......
2484	8	0.0349	17.88	........11......
2486	7	0.0861	15.00	..1......1......
2488	3	0.0236	14.37	.........1......
2489	7	0.0190	38.42	........11......
2491	9	0.0363	12.81	........11......
2493	1	0.0219	28.38	........1.......
2495	2	0.0045	15.75	.........1......
2497	4	0.0121	31.74	..1.....11......
2498	2	0.0370	27.52	..1.....11......
2499	6	0.0216	34.39	........11......
2503	4	0.0088	23.53	........11......
2504	2	0.0418	24.72	..1.............
2506	5	0.0445	26.28	..1.....11......
2507	7	0.0584	25.15	........11......
2509	7	0.0207	27.92	........11......
2510	2	0.0389	20.36	..1.....11......
2511	7	0.0567	17.65	........11......
2514	4	0.0179	26.12	........11......
2515	4	0.0130	35.23	........11......
2516	7	0.0112	22.88	........11......
2518	2	0.0134	24.03	........1.......

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
2519	4	0.0278	43.81	........11......
2526	2	0.0457	25.93	.........1......
2527	4	0.0142	28.04	........11......
2528	4	0.0101	39.93	........11......
2530	13	0.0474	27.91	..1.....11......
2532	7	0.0371	19.90	..1.....11......
2535	7	0.0455	19.71	.........1......
2536	4	0.0163	26.18	........11......
2537	6	0.0229	25.31	..1.....11......
2540	7	0.0282	18.97	........11......
2541	4	0.0269	30.80	........11......
2543	6	0.0183	44.90	........11....1.
2545	6	0.0341	18.07	........11......
2547	2	0.0124	18.95	....
2548	4	0.0216	24.89	........11......
2550	2	0.0503	34.11	........11......
2552	5	0.0051	22.34	........11......
2554	2	0.0406	16.58	........1.......
2555	6	0.0300	31.97	........11......
2556	2	0.0333	15.23	..1.....1.......
2557	3	0.0246	26.82	....
2565	4	0.0037	27.53	........11......
2566	7	0.0318	22.51	........11......
2568	5	0.0322	17.76	.........1......
2571	4	0.0202	23.49	........11......
2572	4	0.0166	21.57	........11......
2573	3	0.0517	30.67	........11......
2577	12	0.0424	14.93	........11......
2578	4	0.0384	35.60	........11......
2579	9	0.0504	14.88	........11......
2580	9	0.0358	15.38	........11......
2581	7	0.0276	17.51	........11......
2583	5	0.0250	21.10	........11......
2585	7	0.0996	13.32	........11......
2586	3	0.0220	23.55	........11......
2589	10	0.0251	27.79	........11......
2590	5	0.0266	23.50	.........1......
2591	6	0.0651	27.34	........11......
2593	6	0.0102	18.16	........11......
2594	4	0.0053	91.53	........11......
2596	4	0.0112	34.55	........11......
2597	5	0.0215	37.82	........11......
2598	6	0.0110	38.24	........11......
2599	7	0.1053	23.57	........11......
2602	12	0.0417	16.35	........11......
2603	13	0.0385	24.60	........11......
2605	4	0.0116	35.53	........11......
2606	5	0.0510	32.33	........11......
2607	4	0.0097	28.26	........11......
2608	5	0.0001	42.81	........11......
2609	2	0.0224	19.43	....
2610	4	0.0266	17.83	........1.......
2614	7	0.0174	22.02	........11......
2618	6	0.0226	35.20	........11......
2619	4	0.0151	29.82	........1.......
2620	7	0.0158	30.45	........11......
2622	8	0.0465	28.18	........11......
2624	4	0.0345	51.83	.........1......
2625	5	0.0718	11.90	........11......
2627	6	0.0227	35.11	........11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
2628	9	0.0149	31.44	........11......
2629	3	0.0104	16.41	.........1......
2630	4	0.0214	39.69	........11......
2631	6	0.0232	34.71	........11......
2635	2	0.0371	18.16	........1.......
2639	4	0.0295	20.37	........11......
2640	4	0.0258	20.79	........11......
2642	11	0.0352	20.43	........11......
2643	13	0.0023	27.91	..1.....11......
2644	2	0.0236	15.03	....
2647	7	0.0577	17.49	........11......
2648	8	0.0485	15.87	........11......
2650	7	0.0511	29.47	........11......
2651	4	0.0087	49.51	........11......
2652	4	0.0058	26.41	........11......
2656	4	0.0207	18.44	........11......
2661	14	0.0442	34.75	..1.....11......
2663	8	0.0101	20.97	........11......
2665	4	0.0259	18.91	........11......
2668	5	0.0312	16.46	........11......
2669	5	0.0112	37.98	........11......
2671	7	0.0142	23.33	........11......
2673	2	0.0107	40.58	..1.....1.......
2675	2	0.0689	16.01	....
2676	2	0.0258	22.78	........11......
2678	9	0.0494	19.79	........11......
2679	5	0.0835	19.18	..1.....11......
2680	10	0.0564	11.17	........11......
2681	7	0.0197	32.82	........11......
2682	4	0.0242	14.86	........11......
2685	2	0.0555	20.48	.........1......
2686	4	0.0393	32.10	........11......
2689	5	0.0120	20.17	........11......
2691	4	0.0187	20.31	........11......
2694	6	0.0173	17.55	........11......
2700	5	0.0290	29.67	.........1......
2701	6	0.0281	25.08	........11......
2703	2	0.0273	16.06	........11......
2704	2	0.0171	23.28	........11......
2705	9	0.0419	12.38	........11......
2706	6	0.0324	30.76	........11......
2708	4	0.0316	32.66	.........1......
2709	4	0.0248	18.48	........11......
2712	7	0.0125	16.42	........11......
2713	6	0.0700	25.18	........11......
2714	2	0.0166	21.56	..1......1......
2716	2	0.0398	14.58	........1.......
2717	2	0.0705	15.12	..1.....11......
2723	6	0.0207	29.21	........11......
2726	6	0.0211	28.91	........11......
2727	5	0.0332	25.30	........11......
2730	4	0.0412	31.35	..1.....11......
2732	4	0.0425	24.50	........11......
2733	7	0.0267	18.65	........11......
2736	6	0.0589	15.09	........11......
2738	2	0.0335	26.37	..1.....1.......
2741	5	0.0390	26.78	........11......
2743	2	0.0219	27.13	.........1......
2745	7	0.0305	17.43	........11......
2746	3	0.0290	16.30	........11......
2748	2	0.0216	26.08	........1.......
2749	3	0.0490	22.83	..1.....11......
2750	2	0.0360	16.81	.........1......
2752	2	0.0422	33.94	........11......
2754	2	0.0643	10.46	..1.....1.......
2755	2	0.1402	16.23	..1......1......
2756	2	0.0225	22.28	....
2762	5	0.0201	21.45	........11......
2763	1	0.0257	25.05	........1.......
2764	1	0.0210	17.47	....
2765	6	0.0281	34.61	........11......
2766	6	0.0145	27.69	........11......
2767	2	0.0378	32.73	....
2770	6	0.0393	16.84	........11......
2771	2	0.0457	24.74	..1......1......
2777	2	0.0357	16.88	..1.....11......
2779	2	0.0260	18.05	.........1......
2780	2	0.0225	19.40	........11......
2781	2	0.0667	23.52	....
2782	2	0.0063	31.84	.........1......
2783	2	0.0195	21.82	........11......
2784	2	0.0213	19.01	........11......
2785	5	0.0334	26.39	........11......
2786	2	0.0556	22.44	........1.......
2788	6	0.0132	25.29	........11......
2789	2	0.0204	17.75	........11......
2790	2	0.0243	23.47	........11......
2796	3	0.0328	25.44	........11......
2798	2	0.0363	16.72	..1.....1.......
2799	2	0.0049	23.99	.........1......
2800	6	0.0119	33.61	........11......
2801	2	0.0221	32.47	........1.......
2805	4	0.0221	32.43	........11......
2807	4	0.0198	28.54	........11......
2809	2	0.0080	28.36	........1.......
2810	2	0.0435	19.24	........11......
2811	3	0.0436	26.53	........11......
2812	2	0.0247	16.86	.........1......
2817	1	0.0068	26.73	....
2818	2	0.0196	17.27	........1.......
2823	2	0.0290	17.87	........1.......
2825	6	0.0462	12.93	........11......
2827	3	0.0734	19.53	........11......
2828	9	0.0222	19.52	..11....11.....
2830	5	0.0483	17.94	..1.....11......
2831	6	0.0929	13.17	........11......
2832	7	0.0424	19.49	........11......
2833	4	0.0408	23.90	........11......
2834	8	0.0434	25.41	..1.....11......
2836	2	0.0646	27.45	........11......
2837	4	0.0372	28.71	........11......
2838	6	0.0097	16.26	........11......
2841	3	0.0395	19.30	........11......
2844	3	0.0127	24.62	........11......
2845	4	0.0143	23.26	..1.....1.......
2847	1	0.0533	18.20	.........1......
2850	2	0.0711	20.78	........1.......
2851	4	0.0781	16.50	........11......
2854	7	0.0332	16.71	..1.....11......
2857	4	0.0417	18.78	.........1......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUP	MPStatW	ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456					1111111 1234567890123456
2858	6	0.0124	21.71	........11......	2974	6	0.0219	14.90	........11......
2859	5	0.0338	14.42	........11......	2977	7	0.0391	19.39	........11......
2861	4	0.0359	23.24	........11......	2980	4	0.0196	21.74	........11......
2863	6	0.0216	35.98	..1.....11......	2981	4	0.0290	31.10	........11......
2866	4	0.0225	36.95	........11......	2982	6	0.0418	27.10	........11......
2869	4	0.0442	24.04	........11......	2984	11	0.0239	20.61	........11......
2871	6	0.0244	22.39	........11......	2985	8	0.0509	22.39	........11......
2875	6	0.0459	22.52	........11......	2990	5	0.0250	17.58	........11......
2876	4	0.0276	21.05	........11......	2991	2	0.0216	18.04	........11......
2877	4	0.0146	41.78	.........1......	2997	2	0.0234	17.32	..1.....11......
2878	5	0.0282	36.18	........11......	2998	2	0.0106	17.79	.........1......
2882	1	0.0171	42.33	....	2999	2	0.0357	14.70	........1.......
2885	2	0.0172	15.36	........1.......	3002	1	0.0523	16.01	........1.......
2886	6	0.0541	13.09	........11......	3004	2	0.0082	20.21	........1.......
2887	2	0.0358	17.65	........11......	3007	2	0.0494	19.80	..1.............
2889	6	0.0347	35.79	.........1......	3008	2	0.0418	25.88	........11......
2890	6	0.0303	20.10	........11......	3012	9	0.0462	37.26	........11......
2891	2	0.0358	40.44	........11......	3014	2	0.0409	16.50	....
2894	4	0.0174	38.33	........11......	3015	4	0.0250	50.63	........1.......
2896	2	0.0402	19.12	....	3022	2	0.0674	10.70	..1.............
2899	6	0.0129	23.38	........11......	3029	2	0.0274	20.16	........11......
2900	4	0.0167	35.65	........11......	3030	1	0.0179	13.72	.........1......
2901	4	0.0372	28.72	........11......	3031	3	0.0327	18.46	........11....1.
2902	5	0.0055	23.62	........11......	3034	5	0.0315	25.97	........11......
2905	6	0.0498	22.64	..1.....11......	3039	2	0.0252	26.48	........11......
2910	9	0.0298	13.37	........11......	3041	2	0.0502	18.76	.........1......
2911	2	0.0657	28.50	........1.......	3042	2	0.0073	26.96	.........1......
2912	2	0.0361	20.19	....	3047	2	0.0239	24.78	........1.......
2913	12	0.0148	32.98	........11......	3048	2	0.0322	15.48	..1......1......
2915	6	0.0105	28.32	........11......	3049	6	0.0260	39.47	..1.....11......
2917	4	0.0261	32.75	........11......	3050	2	0.0068	24.43	........1.......
2918	4	0.0170	42.55	........11......	3055	3	0.0386	21.40	.........1......
2919	4	0.0457	29.77	........11......	3057	2	0.0229	18.34	..1.............
2921	7	0.0136	24.93	........11......	3058	3	0.0169	14.11	.........1......
2923	7	0.0156	20.28	........11......	3059	2	0.0306	13.83	........11......
2924	9	0.0192	27.68	........11......	3060	1	0.0142	23.27	........1.......
2925	7	0.0214	14.39	........11......	3064	2	0.0302	19.21	........11......
2926	5	0.0288	17.14	........11......	3072	4	0.0080	23.53	..1.....11......
2927	6	0.0306	28.90	........11......	3075	3	0.0097	22.38	.........1......
2931	4	0.0630	24.21	.........1......	3080	5	0.0497	27.26	........11......
2932	4	0.0161	50.21	........11......	3081	2	0.0080	25.84	....
2937	6	0.0320	19.53	........11......	3083	4	0.0106	22.47	........11......
2938	7	0.0162	52.27	........11......	3084	4	0.0101	30.37	........11......
2939	7	0.0541	17.26	........11......	3087	2	0.0142	30.73	........1.......
2940	5	0.0144	17.55	........11......	3090	4	0.0173	38.37	........11......
2941	7	0.0185	16.21	........11......	3091	2	0.0037	22.74	.........1......
2944	2	0.0369	19.05	.........1......	3093	5	0.0427	32.22	........11......
2946	4	0.0274	20.19	........11......	3096	4	0.0141	32.33	..1.....11......
2947	4	0.0279	20.00	........11......	3098	4	0.0034	26.36	........11......
2948	2	0.0203	29.47	....	3099	2	0.0606	28.34	........11......
2953	11	0.0613	25.69	........11......	3101	4	0.0416	14.94	..1.....11......
2954	5	0.0200	18.76	........11......	3102	6	0.0004	31.73	........11......
2955	5	0.0384	13.54	........11......	3107	4	0.0112	21.83	..1.....11......
2958	4	0.0319	27.04	........11......	3110	2	0.0159	24.15	........1.......
2961	2	0.0458	15.61	....	3112	6	0.0172	26.65	........11......
2966	3	0.0118	25.53	........11......	3114	4	0.0104	26.05	........11......
2968	2	0.0031	32.87	........11......	3116	6	0.0308	23.95	........11......
2969	5	0.0221	27.00	........11......	3117	4	0.0237	29.95	........11......
2971	4	0.0258	16.51	........11......	3121	2	0.0212	19.08	........1.......
2972	9	0.0325	12.25	........11......	3123	4	0.0096	26.60	........11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
3124	4	0.0083	29.66	........11......
3125	7	0.0294	26.87	..1.....11......
3126	6	0.0406	33.06	........11......
3127	5	0.0258	30.03	..1.....11......
3130	7	0.0163	28.68	........11......
3131	6	0.0203	26.90	.........1......
3133	4	0.0182	22.56	........11......
3135	7	0.0247	13.40	........11......
3136	5	0.0358	30.68	........11......
3138	6	0.0340	15.06	........11......
3142	8	0.0416	22.59	..1.....11......
3143	8	0.0163	31.44	........11......
3144	5	0.0118	23.28	........11......
3145	6	0.0050	24.80	........11......
3146	7	0.0384	15.54	.........1......
3147	6	0.0059	31.44	..1.....11......
3153	9	0.0143	24.34	........11......
3155	6	0.0295	23.38	........11......
3158	12	0.0260	26.06	........11......
3159	11	0.0307	19.06	........11......
3160	6	0.0217	18.01	........11......
3162	7	0.0311	41.39	..1.....1.......
3163	4	0.0057	33.65	........11......
3165	4	0.0278	21.95	........11......
3169	5	0.0914	12.51	........11......
3170	7	0.0261	32.75	........11......
3172	2	0.0087	29.74	........11......
3173	7	0.0244	19.48	........11......
3174	4	0.0233	38.04	........11.....1
3178	8	0.0237	36.02	........11......
3179	4	0.0500	24.79	........11......
3181	2	0.0439	17.48	........1.......
3182	7	0.0334	26.42	..1.....11......
3186	7	0.0210	31.79	..11....11......
3188	2	0.0109	19.23	.........1......
3190	4	0.0225	24.40	........11......
3191	7	0.0374	26.14	........11......
3192	7	0.0116	22.44	........11......
3193	7	0.0163	21.73	..1.....11......
3195	2	0.0327	24.33	........11......
3198	8	0.0423	22.41	........11......
3199	9	0.0380	7.34	..1.....11......
3201	12	0.0205	16.88	..11....11......
3202	8	0.0414	56.89	..1.....11......
3203	4	0.0092	25.22	........11......
3205	9	0.0078	29.99	..1.....11......
3206	7	0.0070	30.26	..1.....11......
3207	4	0.0442	25.17	........11......
3208	5	0.0172	38.49	........11......
3209	6	0.0260	17.22	........11......
3212	8	0.0114	20.69	........11......
3216	5	0.0089	22.30	........11......
3217	7	0.0069	21.08	........11......
3218	8	0.0043	30.67	..1.....11......
3220	11	0.0165	22.66	........11......
3226	10	0.0081	30.83	........11......
3233	6	0.0295	20.35	..1.....11......
3235	4	0.0085	34.60	....
3236	8	0.0125	21.60	..11....11......
3239	4	0.0055	24.72	........11......
3240	4	0.0174	96.15	........11......
3242	5	0.0291	25.82	........11......
3243	2	0.0366	33.27	..1.....1.......
3245	7	0.0053	38.29	........11......
3249	2	0.0209	16.74	........11......
3250	4	0.0627	26.62	........11......
3252	5	0.0421	27.00	........11......
3257	6	0.0337	14.45	........11......
3258	5	0.0613	11.22	........11......
3260	12	0.0509	17.79	........11......
3261	6	0.0577	26.48	..1.....11......
3262	2	0.1143	27.21	........11......
3263	2	0.0412	16.46	.........1......
3265	2	0.0430	14.02	.........1......
3266	8	0.0382	12.97	..1.....11......
3268	2	0.0258	20.59	..1......1......
3270	8	0.0042	25.93	........11......
3271	3	0.0004	29.54	........11......
3274	2	0.0169	38.93	....
3276	2	0.0404	26.33	....
3277	2	0.0590	30.07	........11......
3279	6	0.0476	11.61	........11......
3281	5	0.0392	20.27	........11......
3282	8	0.0371	15.09	........11......
3284	4	0.0052	46.33	........11......
3286	2	0.0214	23.89	.........1......
3287	2	0.0035	32.58	........11......
3288	5	0.7000	1574.17	........111.....
3290	3	0.0142	51.02	........11......
3293	2	0.0083	23.18	....
3294	2	0.0270	23.34	..1......1......
3295	8	0.0331	21.07	........11......
3296	7	0.0450	24.94	..11....11......
3297	4	0.0270	28.04	........11......
3299	6	0.0176	20.02	........11......
3301	1	0.0240	20.57	........1.......
3302	5	0.0206	24.39	.........1......
3303	4	0.0408	31.50	..1......1......
3304	8	0.0165	24.81	........11......
3306	2	0.0296	22.30	........11......
3308	6	0.0191	41.99	........11......
3309	7	0.0567	9.70	........11......
3313	2	0.0341	30.02	.........1......
3314	3	0.0336	18.21	........11......
3319	4	0.0136	43.29	.........1......
3321	5	0.0461	15.56	........11......
3323	6	0.0209	17.50	........11......
3327	2	0.0164	39.48	........11......
3328	4	0.0303	34.90	........11......
3329	10	0.0438	33.34	........11......
3332	3	0.1203	17.52	........11......
3334	4	0.0385	26.96	........11......
3337	6	0.0191	30.38	........11......
3338	3	0.0071	19.86	........1.......
3340	2	0.0145	21.02	........1.......
3341	4	0.0097	44.60	.........1......
3343	2	0.0139	23.58	........1.......
3344	6	0.0468	16.17	........11......
3347	4	0.0225	38.66	........11......
3348	4	0.0271	33.68	........11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW	ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456					1111111 1234567890123456
3349	4	0.0205	25.56	........11......	3487	2	0.0165	28.53	........11......
3350	15	0.0137	15.69	........11......	3489	7	0.0240	18.78	........11......
3351	4	0.0050	47.33	........11......	3490	11	0.0159	23.09	..1.....11......
3358	6	0.0168	35.61	........11......	3491	8	0.0241	29.71	..1.....11......
3359	6	0.0121	18.33	........11......	3492	2	0.0572	27.84	.........1......
3360	5	0.0002	54.72	..1.....11......	3496	4	0.0021	30.05	........11......
3363	2	0.0517	23.28	........11......	3497	3	0.0302	29.09	..1.....11......
3365	2	0.0271	30.67	..1.....11......	3498	2	0.0330	15.29	..1.....1.......
3366	4	0.0436	33.42	........11......	3499	4	0.0119	40.29	........11......
3371	2	0.0344	24.85	..1.............	3500	2	0.0759	13.29	........1.......
3374	2	0.0142	30.69	........11......	3502	4	0.0176	43.68	.........1......
3376	2	0.0426	21.33	........11......	3503	2	0.0105	25.94	..1......1......
3377	7	0.0164	31.32	.........1......	3505	4	0.0356	30.74	........1.......
3378	6	0.0355	16.17	..1.....11......	3506	8	0.0644	27.49	..1.....11......
3381	7	0.0340	16.52	........11......	3507	2	0.0322	40.68	..1.....11......
3383	2	0.0229	26.53	........11......	3508	2	0.0170	32.24	........1.......
3384	6	0.0140	21.42	........11......	3509	2	0.0169	28.13	........1.......
3385	2	0.0364	19.18	........1.......	3510	1	0.0213	28.78	........1.......
3386	2	0.0230	25.25	.........1......	3512	3	0.0481	11.55	........1.......
3388	8	0.0177	22.92	..11....11......	3514	4	0.0078	68.96	........1.......
3392	2	0.0265	11.27	........11......	3515	2	0.0308	28.81	.........1......
3393	4	0.0323	21.32	........11......	3516	5	0.0324	28.06	........11......
3395	7	0.0498	27.23	........11......	3517	5	0.0296	12.24	........11......
3402	4	0.0022	24.69	........11......	3518	2	0.0209	33.42	........1.......
3404	9	0.0257	22.85	..1.....11......	3519	2	0.0174	24.18	....
3408	4	0.0119	27.97	........11......	3520	2	0.0262	15.64	..1.....1.......
3409	2	0.0332	29.06	........11......	3521	1	0.0155	14.73	....
3410	5	0.0380	15.62	.........1......	3523	2	0.0391	22.26	..1.....1.......
3411	6	0.0260	16.46	.........1......	3524	3	0.0112	27.52	........11......
3413	5	0.0370	14.44	........11......	3527	2	0.0271	20.28	........11......
3414	5	0.0188	17.64	........11......	3528	2	0.0199	24.77	..1.....1.......
3420	15	0.0425	29.48	........11....1.	3531	6	0.0174	26.53	........11......
3421	6	0.0222	17.02	........11......	3533	3	0.0869	13.62	........11......
3422	7	0.0522	17.58	........11......	3535	3	0.0204	15.45	.........1......
3424	9	0.0272	24.34	........11......	3537	2	0.0095	31.20	........11......
3427	6	0.0152	21.53	........11......	3539	7	0.0112	30.17	........11......
3430	5	0.0249	27.88	........11......	3542	4	0.0210	38.23	........11......
3432	2	0.0214	45.56	....	3543	5	0.0266	42.78	........11......
3433	7	0.0221	20.50	........11......	3544	4	0.0244	28.16	........11......
3434	4	0.0084	34.77	........11......	3545	6	0.0308	30.15	........11......
3435	6	0.0272	20.25	........11......	3546	6	0.0373	23.85	........11......
3436	4	0.0271	30.69	........11......	3550	4	0.0312	32.83	........1.......
3439	4	0.0496	18.87	........11......	3551	7	0.0023	12.43	..1.....11......
3440	5	0.0270	29.39	........11......	3556	4	0.0098	44.53	........11......
3441	4	0.0123	43.58	........11......	3557	6	0.0417	47.14	........11......
3444	6	0.0166	34.21	..1.....11......	3558	2	0.0326	24.38	........11......
3448	9	0.0317	17.91	........11......	3562	2	0.0370	16.58	....
3453	7	0.0947	19.75	........11......	3563	2	0.0451	34.40	..1.....11......
3454	8	0.0109	23.14	........11......	3567	6	0.0143	35.17	........11......
3456	2	0.0167	18.72	.........1......	3568	6	0.0102	47.84	....
3457	4	0.0367	30.29	.........1......	3572	5	0.0138	31.15	........11......
3458	7	0.0523	16.01	........11......	3573	3	0.0580	16.67	........11......
3459	5	0.0558	14.80	..11....11......	3575	5	0.0441	28.93	........11......
3462	5	0.0097	29.58	........11......	3577	8	0.0181	68.41	........11......
3465	10	0.0262	17.14	........11......	3579	8	0.0038	24.63	........11......
3469	2	0.0492	36.11	........11......	3580	3	0.0422	19.55	........11......
3473	7	0.0141	20.37	........11......	3581	5	0.0142	46.57	..1.....11......
3483	8	0.0234	15.82	........11......	3585	6	0.0230	29.02	........11......
3484	2	0.0377	22.67	....	3586	2	0.0150	26.06	....
3486	2	0.0218	17.97	........1.......	3588	3	0.0195	37.94	........11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
3589	2	0.0256	15.11	........11......
3590	3	0.0297	16.87	........11......
3593	3	0.0142	14.70	........11......
3595	3	0.0146	30.29	........11......
3597	4	0.0208	46.20	........11......
3600	3	0.0333	19.16	........11......
3601	12	0.0106	42.75	........11......
3602	3	0.0170	14.07	..1.....11......
3603	4	0.0171	28.01	..1.....11......
3605	2	0.7000	1581.43	........1.1.....
3609	5	0.0164	43.28	........11......
3610	2	0.0110	15.97	........11......
3611	4	0.0116	35.63	........11......
3612	2	0.0093	27.57	.........1......
3615	2	0.0427	38.74	....
3616	4	0.0388	25.65	..1.....11......
3617	4	0.0482	24.11	..1.....11......
3618	7	0.0139	35.69	........11......
3619	2	0.0086	23.78	........11......
3623	5	0.0234	31.56	........11......
3629	7	0.0586	16.58	........11......
3632	7	0.0112	39.73	........11......
3634	5	0.0112	20.81	........11......
3635	4	0.0176	12.61	........11......
3638	6	0.0669	26.98	.........1......
3639	5	0.0121	22.03	........11......
3646	4	0.0129	30.83	........11......
3651	7	0.0192	18.30	........11......
3652	4	0.0200	27.14	........11......
3653	4	0.0302	15.98	........11......
3654	6	0.0136	15.75	........11......
3655	4	0.0140	70.83	........1.......
3656	11	0.0118	20.33	........11......
3657	8	0.0372	20.81	..1.....11......
3659	4	0.0121	23.01	........11......
3662	4	0.0362	27.82	........11......
3663	7	0.0112	41.53	........11......
3664	6	0.0351	23.50	........11......
3665	4	0.0332	24.17	........11......
3668	1	0.0171	21.21	........1.......
3669	2	0.0302	16.74	........11......
3672	2	0.0342	15.02	........11......
3673	6	0.0307	19.07	........11......
3677	3	0.0088	22.48	.........1......
3679	2	0.0192	17.44	........11......
3680	10	0.0380	17.94	........11......
3688	6	0.0005	64.93	........11......
3689	2	0.0453	22.69	........11......
3690	4	0.0096	22.46	..1.....1.......
3691	3	0.0106	16.26	........11......
3692	7	0.0136	24.94	........11......
3695	8	0.0088	21.48	........11......
3698	5	0.0258	18.10	........11......
3699	8	0.0355	18.54	........11......
3700	7	0.0193	28.91	..11....11......
3701	7	0.0580	19.14	........11......
3705	5	0.0195	28.75	..1.....11......
3707	4	0.0155	22.34	........11......
3710	4	0.0278	22.99	........11......
3711	5	0.0331	22.08	........11......

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
3712	5	0.0313	32.78	........11......
3718	2	0.0192	27.68	....
3719	4	0.0241	17.91	........11......
3720	5	0.0549	14.25	........11......
3721	3	0.0466	28.15	........11......
3722	8	0.0314	19.73	........11......
3733	5	0.0194	26.29	........11.....1
3734	6	0.0239	25.97	........11......
3736	3	0.0516	35.24	........11......
3738	11	0.0891	12.26	........11......
3741	6	0.0211	20.03	........11......
3742	10	0.0180	22.69	........11......
3743	9	0.0311	12.51	........11......
3745	5	0.0243	12.31	........11......
3748	2	0.0344	19.74	........11......
3749	7	0.0139	20.50	........11......
3750	2	0.0342	31.38	........11......
3752	10	0.0094	10.87	..1.....11......
3755	9	0.0161	17.40	........11......
3756	3	0.0151	18.78	........11......
3757	7	0.0003	12.13	........11......
3758	2	0.0335	20.94	.........1......
3760	5	0.0321	23.47	........11......
3762	6	0.0338	15.11	........11......
3763	4	0.0368	19.98	........11....1.
3764	2	0.0227	19.28	.........1......
3765	2	0.0257	26.22	........11......
3768	4	0.0359	42.25	........11......
3769	9	0.0129	21.33	........11......
3770	6	0.0067	20.48	........11......
3771	7	0.0083	22.12	........11......
3773	8	0.0296	17.71	........11......
3774	4	0.0590	30.07	.........1......
3777	2	0.0178	19.89	.........1......
3778	4	0.0246	26.79	........11......
3782	3	0.0350	22.48	..1......1......
3783	2	0.0394	16.82	..1......1......
3785	4	0.0117	46.72	........11......
3786	2	0.0791	25.98	........11......
3788	3	0.0392	30.69	........11......
3790	2	0.0209	30.46	........1.......
3791	4	0.0190	31.97	........11......
3792	4	0.0149	23.79	........11......
3794	7	0.0465	74.09	........11......
3797	5	0.0220	33.95	........11......
3798	8	0.0230	15.96	........11......
3800	2	0.0135	9.52	..1.....11......
3802	8	0.0267	15.51	........11......
3804	7	0.0267	24.57	........11......
3807	4	0.0147	22.87	........11......
3808	5	0.0042	21.48	........11......
3809	4	0.0376	20.69	..1.....11......
3810	4	0.0216	20.74	........11......
3814	5	0.0137	37.63	........11......
3816	4	0.0383	27.05	........11......
3817	8	0.0119	15.34	........11......
3819	4	0.0315	25.99	........11......
3822	2	0.0159	22.01	........11......
3824	1	0.0318	18.72	.........1......
3825	4	0.0360	17.59	........11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
3826	6	0.0177	18.20	........11......
3830	4	0.0333	36.53	..1.....11......
3831	4	0.0381	14.23	........11......
3832	4	0.0181	32.72	........11......
3833	2	0.0012	30.54	........11......
3835	6	0.0476	23.15	........11......
3836	2	0.0115	21.58	........1.......
3837	2	0.0214	23.88	........11......
3838	2	0.0025	22.34	........1.......
3842	7	0.0283	18.94	........11......
3844	2	0.0462	28.28	....
3848	2	0.0247	18.49	........11......
3849	3	0.0250	21.13	........1.......
3850	3	0.0292	15.53	..1.....11......
3852	11	0.0194	36.26	........11......
3853	5	0.0195	30.08	........11......
3854	4	0.0127	13.55	........11......
3856	4	0.0398	26.54	..1......1......
3859	8	0.0173	40.27	........11......
3860	4	0.0353	29.50	........11......
3861	4	0.0703	19.06	..1.....11......
3862	8	0.0109	30.52	........11......
3864	7	0.0169	21.36	........11......
3865	4	0.0398	20.12	........11......
3867	3	0.0425	16.95	........11......
3868	7	0.0234	20.86	..1.....11......
3869	2	0.0157	26.68	.........1......
3870	6	0.0237	29.92	..1.....11......
3871	6	0.0158	36.63	..1.....11......
3875	2	0.0177	26.26	....
3877	4	0.0344	27.24	........1.......
3878	2	0.0094	37.78	....
3880	5	0.0233	15.13	........11......
3882	5	0.0249	25.43	..1.....11......
3883	2	0.0392	30.70	.........1......
3885	4	0.0359	26.67	........11......
3890	2	0.0326	16.11	..1.....11......
3891	2	0.0028	26.35	........1.......
3892	9	0.0392	17.66	........11......
3893	4	0.0104	29.87	........1.......
3894	4	0.0419	29.69	........11......
3896	5	0.0508	29.55	........11......
3897	3	0.0157	29.24	........11......
3900	8	0.0159	20.10	........11......
3903	2	0.0254	31.69	..1.....11......
3907	10	0.0586	25.11	........11......
3909	7	0.0488	23.97	.........1......
3912	7	0.0201	19.58	........11......
3914	3	0.0327	33.61	........11......
3917	6	0.0125	19.69	........11......
3918	6	0.0115	23.57	........11......
3919	2	0.0061	25.66	.........1......
3920	7	0.0175	21.96	..1.....11......
3921	7	0.0160	31.69	........11......
3924	6	0.0266	28.28	..1.....11......
3926	3	0.0097	19.54	.........1......
3928	7	0.0133	24.04	........11......
3929	4	0.0113	25.00	........11......
3930	3	0.0151	41.16	........1.......
3931	3	0.0195	19.00	........11....1.

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
3933	6	0.0150	34.32	........11......
3934	4	0.0290	18.73	........11......
3936	6	0.0202	22.44	........11......
3938	7	0.70001581.43		........111.....
3940	3	0.0760	13.91	........11......
3941	6	0.0167	27.09	........11......
3942	5	0.0159	25.30	........11......
3943	5	0.0060	24.85	........11......
3944	4	0.0169	24.53	.........1......
3946	6	0.0362	26.57	........11......
3948	9	0.0139	20.51	........11......
3949	5	0.0332	16.71	........11......
3950	1	0.0295	30.83	.........1......
3951	8	0.0196	25.00	........11......
3952	10	0.0075	23.24	..1.....11......
3956	4	0.0126	24.78	........11......
3958	10	0.0357	26.75	........11......
3959	5	0.0076	24.24	........11......
3960	6	0.0327	29.28	........11......
3962	2	0.0364	27.74	.........1......
3964	3	0.0257	19.88	........11......
3965	8	0.0470	21.25	........11......
3968	5	0.0342	21.70	..1.....11......
3969	3	0.0079	21.56	........11......
3972	8	0.0072	18.86	..1.....11......
3973	4	0.0141	26.83	........11......
3975	2	0.0340	24.99	..1.....11......
3980	2	0.0315	21.61	..1......1......
3984	7	0.0078	24.92	........11......
3985	2	0.0530	30.31	....
3986	3	0.0612	14.80	..1......1......
3990	4	0.0264	68.07	........11......
3992	2	0.0289	34.15	........11......
4004	2	0.0333	33.30	.........1......
4008	3	0.0404	15.86	.........1......
4010	6	0.0169	26.86	..1.....11......
4013	4	0.0198	41.20	........1.......
4015	6	0.0025	17.00	.........1......
4016	2	0.0197	14.33	........1.......
4017	2	0.0165	24.83	.........1......
4018	9	0.0129	23.37	........11......
4019	2	0.0068	14.75	........11......
4020	5	0.0315	18.81	........11......
4021	4	0.0081	24.49	........11......
4022	5	0.0253	23.03	........11......
4025	5	0.0077	24.08	........11......
4026	6	0.0160	23.02	..1.....11......
4027	9	0.0203	18.59	........11......
4028	8	0.0171	26.71	........11......
4029	4	0.0195	23.88	........11......
4030	2	0.0163	26.13	........11......
4032	5	0.0095	17.94	..1.....11......
4037	8	0.0166	32.67	........11......
4038	7	0.0216	18.03	..11....1.......
4039	7	0.0352	19.52	........11......
4040	6	0.0346	19.68	........11......
4042	7	0.0109	24.24	........11......
4043	2	0.0247	29.33	.........1......
4044	2	0.0386	28.19	..1.....11......
4046	4	0.0508	22.42	........1.......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
4047	2	0.0096	34.15	........1.......
4048	7	0.0049	22.92	........11......
4050	2	0.0192	31.77	........11......
4051	2	0.0414	22.66	..1.....11......
4053	5	0.0196	21.76	........11......
4058	2	0.0579	30.37	..1.............
4062	7	0.0102	22.87	........11......
4064	4	0.0204	21.34	........11......
4067	4	0.0391	18.51	........11......
4069	9	0.0220	14.21	........11......
4070	6	0.0334	15.91	........11......
4071	2	0.0280	30.19	..1.....11......
4072	6	0.0369	15.13	........11......
4073	6	0.0205	40.48	........11......
4074	4	0.0325	32.18	........1.......
4075	2	0.0255	28.86	.........1......
4076	3	0.0495	24.91	........11......
4077	2	0.0418	35.72	........1.......
4078	4	0.0439	36.51	........11......
4080	8	0.0678	11.17	........11....1.
4082	10	0.0193	26.33	........11......
4084	3	0.0426	29.42	........11......
4085	2	0.0456	24.77	..1......1......
4087	8	0.0386	15.50	........11......
4089	10	0.0738	12.29	..1.....11......
4090	2	0.0152	21.49	........1.......
4092	11	0.0266	18.66	........11.....1
4095	4	0.0111	18.22	........11......
4096	2	0.0346	31.21	........1.......
4098	4	0.0071	32.88	....
4099	2	0.0555	21.46	........11......
4100	5	0.0614	33.83	........11......
4101	4	0.0217	28.53	..1.....1.......
4104	2	0.0304	23.03	..1.....1.......
4105	2	0.0207	33.58	........11......
4106	3	0.0371	30.14	........11......
4108	4	0.0190	21.11	..1.....11......
4111	2	0.0043	21.34	........1.......
4113	12	0.0219	17.12	........11......
4114	2	0.0093	25.14	........11......
4115	2	0.0491	27.41	..1......1......
4117	2	0.0163	31.48	..1.....11......
4119	5	0.0369	25.14	........11......
4120	4	0.0275	29.10	........11......
4122	2	0.0457	22.58	..1......1......
4123	2	0.0199	25.95	........11......
4125	3	0.0247	16.88	........11......
4126	4	0.0285	37.65	........11......
4127	4	0.0461	29.65	........11......
4128	4	0.0066	28.39	..1.....11......
4129	5	0.0090	30.71	..1.....11......
4130	4	0.0226	29.29	........11......
4137	7	0.0330	19.24	........11......
4138	6	0.0339	79.16	........11......
4139	4	0.0165	43.15	........1.......
4145	7	0.0109	24.29	........11......
4147	6	0.0301	19.26	........11......
4148	9	0.0392	17.66	........11......
4149	4	0.0261	27.26	........11......
4150	4	0.0259	21.74	........11......

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
4154	3	0.0119	27.88	........11......
4158	4	0.0370	37.96	........11......
4161	2	0.0115	32.59	........11......
4165	5	0.0129	25.60	........11......
4167	2	0.0376	27.30	.........1......
4168	5	0.0157	17.60	........11......
4173	4	0.0220	22.53	........11......
4174	2	0.0308	36.25	..1.....1.......
4175	6	0.0514	19.41	........11......
4180	3	0.0149	31.41	.........1......
4181	4	0.0757	19.24	..1.....11......
4189	2	0.0208	19.23	..1.....1.......
4190	5	0.0132	31.84	........11......
4191	4	0.0218	29.81	..1.....1.......
4193	6	0.0188	35.22	........11......
4195	3	0.0309	26.23	........11......
4197	5	0.0237	10.86	..1.....11......
4198	4	0.0187	26.80	........11......
4199	5	0.0387	16.98	........11......
4200	2	0.0200	18.75	........1.......
4202	2	0.0651	32.88	..1.....11......
4204	2	0.0345	17.98	........11......
4206	2	0.0361	29.17	........1.......
4208	3	0.0317	37.40	.........1......
4210	10	0.0277	33.31	........11......
4212	6	0.0479	30.45	..1.....11......
4213	8	0.0171	21.25	........11......
4214	3	0.0334	20.98	........11......
4215	6	0.0788	21.64	........11......
4216	2	0.0062	24.44	..1......1......
4218	2	0.0079	20.61	.........1......
4219	2	0.0253	21.96	.........1......
4223	6	0.0369	33.12	........11......
4227	10	0.0247	16.88	........11......
4228	2	0.0120	21.05	........1.......
4229	9	0.0219	24.76	........11......
4235	7	0.0263	28.42	........11......
4240	4	0.0176	22.95	........11......
4241	4	0.0023	25.53	........1.......
4242	5	0.0109	35.08	........11......
4244	4	0.0157	38.47	........11......
4245	4	0.0083	26.62	........11......
4246	2	0.0113	23.82	....
4247	2	0.0307	19.07	........11......
4248	4	0.0144	15.99	..1.....11......
4249	6	0.0268	33.83	........11......
4251	2	0.0072	26.00	..1.....11......
4252	5	0.0190	26.53	........11......
4253	4	0.0118	32.19	........11......
4254	6	0.0346	28.44	........11......
4255	15	0.0017	63.72	........11......
4256	2	0.0161	20.89	........11......
4258	2	0.0451	28.59	..1.....11......
4259	5	0.0201	28.29	........11......
4260	2	0.0587	22.86	..1.....11......
4261	2	0.0374	22.76	..1.....11......
4264	7	0.0120	25.37	........11......
4268	6	0.0062	35.23	........11......
4269	5	0.0106	22.47	..1.....11.....
4270	2	0.0326	14.68	.........1......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
4274	6	0.0138	34.20	........11......
4275	7	0.0166	13.58	........11......
4276	6	0.0084	20.00	..1.....11......
4277	4	0.0127	32.44	........11......
4283	9	0.0482	17.45	........11......
4285	6	0.0643	18.18	........11......
4286	3	0.0686	25.43	.........1....1.
4287	2	0.0337	18.18	..1.....1.......
4288	5	0.0354	30.84	........11......
4291	4	0.0601	27.16	........11......
4294	7	0.0210	25.24	........11......
4295	4	0.0307	15.15	........11......
4297	1	0.0203	28.18	........1.......
4299	2	0.0246	18.55	.........1......
4300	9	0.0274	17.58	........11......
4302	7	0.0417	20.58	........11......
4303	3	0.0219	13.59	.........1......
4304	4	0.0083	26.62	........11......
4305	6	0.0282	31.49	........11......
4306	13	0.0221	32.48	........11......
4309	9	0.0216	22.72	........11......
4316	6	0.0323	28.14	........11......
4318	4	0.0284	37.76	........11......
4319	2	0.0072	28.50	....
4320	3	0.0050	14.19	........11......
4322	2	0.0060	23.75	....
4324	5	0.0233	31.60	........11......
4325	10	0.0250	26.60	........11......
4326	5	0.0276	25.28	........11......
4328	2	0.0065	26.08	........11......
4330	2	0.0165	19.74	........1.......
4331	12	0.0375	12.50	........11......
4336	7	0.0104	26.06	.........1......
4337	2	0.0249	35.11	........11......
4338	2	0.0085	25.06	........11......
4341	6	0.0012	29.57	........11......
4345	4	0.0276	26.48	........11......
4346	5	0.0233	31.61	........11......
4348	4	0.0387	102.28	........11......
4351	9	0.0196	28.71	........11......
4353	7	0.0499	22.61	..1.....11......
4358	8	0.0296	28.07	........11......
4359	3	0.0224	17.73	........11......
4360	4	0.0150	29.93	........11......
4361	3	0.0451	21.71	........11......
4364	5	0.0168	14.80	........11......
4365	3	0.0210	27.70	..1.....11......
4369	3	0.0674	23.40	........11......
4372	6	0.0124	31.44	..11....11......
4373	2	0.0226	15.36	....
4375	4	0.0442	19.10	........11......
4377	4	0.0294	17.77	........11......
4382	4	0.0275	29.12	........11......
4383	6	0.0243	21.41	........11......
4387	4	0.0254	20.97	........11......
4388	3	0.0421	13.54	........11......
4391	5	0.0097	26.88	........11......
4392	6	0.0097	21.39	..1.....11......
4393	6	0.0124	37.76	........1.......
4394	1	0.0018	27.44	....
4396	5	0.0122	21.92	........11......
4397	1	0.0174	17.51	....
4400	6	0.0155	18.53	..1.....11......
4401	7	0.0004	42.79	..1.....11......
4402	6	0.0414	29.86	........11......
4405	2	0.0615	38.82	........11......
4407	10	0.0567	22.22	........11....1.
4409	4	0.0188	32.11	........11......
4412	3	0.0212	26.35	..1.....11......
4417	3	0.0573	27.82	........1.......
4418	4	0.0217	28.53	........11......
4421	7	0.0154	30.77	.........1......
4422	2	0.0246	22.27	.........1......
4423	2	0.0417	37.45	........11......
4425	7	0.0134	19.07	........11......
4426	8	0.0390	23.35	........11......
4427	3	0.0304	31.79	....
4428	3	0.0164	26.08	........11......
4429	6	0.0106	16.29	..1.....1.......
4430	6	0.0274	26.59	........11......
4432	3	0.0059	18.93	.........1......
4433	4	0.0181	25.99	.........1......
4434	5	0.0148	25.01	........11......
4439	6	0.0077	34.69	........11......
4440	10	0.1044	13.01	..1.....11......
4441	6	0.0139	25.87	........11......
4443	4	0.0421	13.54	........1.......
4445	5	0.0103	20.74	........11......
4446	4	0.0339	43.48	........11......
4447	6	0.0166	29.77	........11......
4451	5	0.0145	34.96	........11......
4452	8	0.0369	28.83	........11......
4453	2	0.0922	21.94	.........1......
4454	3	0.0339	28.73	........1.......
4459	8	0.0370	15.11	..1.....11......
4462	4	0.0221	38.99	..1.....11......
4463	2	0.0293	23.43	..1......1......
4464	3	0.0154	16.98	........11......
4465	17	0.0156	22.21	..1.....11......
4469	2	0.0132	20.11	....
4473	4	0.0129	32.17	........11......
4476	2	0.0103	22.71	........11......
4477	5	0.0263	12.42	........11......
4478	4	0.0089	21.36	........11......
4479	7	0.0347	27.15	........11......
4481	4	0.0059	25.07	.........1......
4486	6	0.0011	34.06	........11......
4495	5	0.0218	49.51	........11......
4496	7	0.0273	23.20	........11......
4497	12	0.0563	28.08	........11......
4498	2	0.0431	35.19	........11......
4499	6	0.0347	25.92	..1.....11......
4501	6	0.0164	82.55	........11......
4502	3	0.0866	21.62	........11......
4503	6	0.0003	51.29	........11......
4504	8	0.0121	29.04	........11......
4506	2	0.0332	26.50	........11......
4507	3	0.0618	25.59	..1......1......
4508	5	0.0363	17.54	........11......
4509	4	0.0273	32.03	........11......

IMPS Missed-Predictions Catalog

ID/1	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
4512	4	0.0348	32.59	........11......
4516	2	0.0341	23.84	..1.....1.......
4517	5	0.0153	22.42	........11......
4518	7	0.0218	16.39	........11......
4519	2	0.0239	18.81	.........1......
4520	4	0.0259	22.77	........11......
4523	4	0.0254	30.28	.........1......
4524	7	0.0183	23.56	........11......
4525	11	0.0174	29.08	........11......
4527	3	0.0075	24.35	........11......
4528	5	0.0309	26.22	........11......
4529	3	0.0452	29.93	........11......
4533	13	0.0300	21.15	........11......
4535	3	0.0169	32.30	..1......1......
4539	4	0.0469	21.27	........11......
4541	6	0.0445	19.93	.:......11......
4545	6	0.0350	35.60	........11......
4546	6	0.0139	20.52	........1.......
4548	8	0.0261	15.68	........11.....1
4549	8	0.0072	26.00	........11......
4550	7	0.0251	24.22	..11....11......
4552	6	0.0226	16.08	........1.......
4553	2	0.0193	27.61	..1.....11......
4556	7	0.0311	17.27	..1.....11......
4557	4	0.0766	28.94	..1.....11......
4558	7	0.0338	26.25	..1.....11......
4560	4	0.0282	32.98	....
4564	2	0.0101	28.90	..1.....11......
4566	4	0.0198	35.94	........11......
4567	3	0.0109	29.16	....
4569	2	0.0699	24.07	..1.....1.......
4571	5	0.0205	40.55	........11......
4572	2	0.0156	29.32	..1.....1.......
4575	7	0.0603	31.15	........11......
4577	5	0.0213	33.07	........11......
4578	3	0.0084	30.32	........11......
4580	3	0.0644	23.94	..1.....11......
4582	3	0.0135	28.74	........11......
4583	2	0.0141	28.08	....
4585	2	0.0075	36.80	.........1......
4586	4	0.0201	17.06	........11......
4587	2	0.0005	47.55	........11......
4588	8	0.0230	33.30	..1.....11......
4590	6	0.0174	21.04	........11......
4591	2	0.0228	15.28	.........1......
4592	11	0.0178	37.93	........11......
4594	8	0.0216	13.07	........11......
4596	7	0.0005	37.00	........11......
4598	4	0.0195	36.20	........11......
4599	6	0.0097	40.66	........11......
4601	5	0.0229	27.81	.........1......
4603	2	0.0252	34.88	.........1......
4605	10	0.0205	20.31	..11....11......
4606	5	0.0366	20.03	........11......
4607	2	0.0749	17.63	.........1......
4608	4	0.0620	14.70	........11......
4610	4	0.0316	18.79	........1.......
4612	2	0.0574	19.23	..1.....11......
4615	2	0.0195	31.52	........11......
4616	6	0.0115	43.05	..11....11.....
4618	4	0.0189	26.60	........11......
4619	5	0.0359	23.24	..1.....11......
4620	5	0.0260	16.46	..1.....1.......
4622	10	0.0170	37.01	........11......
4623	6	0.0125	31.21	........11......
4630	2	0.0165	21.64	....
4631	7	0.0296	20.33	........11......
4635	3	0.0480	19.20	..1.....11......
4636	9	0.0396	19.25	........11......
4637	6	0.0219	22.56	........11......
4639	2	0.0121	30.36	....
4643	7	0.0383	13.55	........11......
4644	2	0.0249	29.19	........1.......
4647	5	0.0086	41.38	........11......
4649	7	0.0525	29.06	........11......
4651	4	0.0205	28.01	........11......
4652	11	0.0115	27.12	........11......
4653	3	0.0117	32.36	.........1......
4654	13	0.0487	12.58	........11......
4655	6	0.0147	21.86	........11......
4656	2	0.0336	22.93	..1.............
4658	8	0.0138	35.82	........11......
4664	4	0.0174	31.84	........11......
4665	4	0.0194	37.95	........1.......
4666	7	0.0310	15.76	........11......
4667	4	0.0339	22.84	..1.....11......
4670	6	0.0218	19.69	........11......
4673	6	0.0843	19.98	..1.....11......
4675	5	0.0230	24.13	.........1......
4676	6	0.0530	19.12	........11......
4677	9	0.0127	42.88	..11....11.....
4678	11	0.0459	12.96	..1.....11......
4679	9	0.0339	33.00	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
1	8	0.0355	28.09	........11......
2	2	0.0633	13.27	........1.......
4	3	0.0102	17.35	........11......
5	8	0.0196	22.78	........11......
6	10	0.0207	12.42	..1.....11......
9	4	0.0224	18.14	........11......
11	7	0.0507	15.52	........11......
12	2	0.0317	9.84	........11......
13	6	0.0093	22.91	........11......
14	2	0.0164	27.91	..............1.
15	6	0.0132	30.46	........11......
17	6	0.0053	22.95	........11......
19	4	0.0239	28.49	........11......
20	5	0.0707	33.02	........11......
22	4	0.0153	44.87	........1.......
23	4	0.0108	22.25	........11......
24	3	0.0184	27.39	........11......
25	8	0.0293	11.28	........11......
26	5	0.0112	33.10	........11......
27	4	0.0773	24.52	........11......
28	7	0.0829	18.38	........11......
30	5	0.0215	15.04	........11......
34	3	0.0352	23.48	........11......
36	5	0.0093	17.32	..1.....11......
37	10	0.0115	12.98	........11......
38	8	0.0347	10.95	........11......
39	5	0.0093	19.61	........11......
41	2	0.0081	24.55	........11......
42	2	0.0226	36.82	........11......
43	10	0.0552	11.28	..1.....11......
45	4	0.0330	29.02	........11......
46	4	0.0018	32.58	........11......
47	7	0.0145	23.03	........11......
52	7	0.0139	23.52	........11......
54	3	0.0289	19.63	........11......
55	4	0.0035	23.37	........11......
57	7	0.0899	14.68	........11......
58	7	0.0218	23.67	........11......
59	6	0.0058	23.03	........11......
60	4	0.0279	13.39	........1.......
63	6	0.0247	22.25	........11......
64	2	0.0147	16.59	........1.......
65	2	0.0565	18.51	........11......
66	2	0.0087	23.86	........11......
67	4	0.0375	19.79	........11......
68	2	0.0118	32.16	........1.......
69	4	0.0228	29.16	........11......
71	4	0.0161	27.58	........11......
72	10	0.0437	16.73	........11......
74	2	0.0090	23.27	.........1......
75	3	0.0112	33.06	.........1......
76	2	0.0209	15.27	..1.....11......
77	4	0.0312	12.48	.........1......
78	7	0.0574	22.92	........11......
79	1	0.0277	33.30	........1.......
80	2	0.0106	18.67	..1......1......
81	4	0.0201	32.55	.........1......
82	4	0.0071	43.39	.........1......
83	2	0.0203	15.47	..1.............
84	11	0.0091	23.07	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
88	6	0.0108	26.70	..11.....1......
89	4	0.0365	36.53	.........1......
91	7	0.0063	17.54	........11......
92	7	0.0256	17.20	..11....11......
93	5	0.0367	28.91	........11......
95	3	0.0359	19.33	..1.....11......
96	2	0.0023	31.65	........1.......
97	5	0.0079	22.39	........11......
99	4	0.0063	22.07	........11......
100	2	0.0313	26.04	........1.......
101	2	0.0409	27.41	.........1......
102	6	0.0201	28.32	........11......
103	2	0.0181	18.59	.........1......
105	3	0.0139	22.48	........11......
106	3	0.0167	21.47	........11......
107	5	0.0033	24.33	........11......
108	6	0.0074	21.14	........11......
109	2	0.0163	27.35	.........1......
110	10	0.0173	21.10	........11......
111	3	0.0137	31.58	........11......
112	6	0.0518	15.37	........11......
113	5	0.0191	20.35	.........1......
116	8	0.0317	28.39	..11....11......
118	5	0.0001	30.77	........11......
120	4	0.0046	19.47	........11......
122	7	0.0038	35.75	........11......
123	3	0.0090	21.88	........11......
124	6	0.0037	35.22	........11......
125	6	0.0262	24.56	..1.....11......
126	3	0.0030	33.36	..1......1......
129	2	0.0067	48.97	........11......
130	8	0.0190	80.27	........11......
132	2	0.0117	51.25	........1.......
133	2	0.0125	62.38	..1.....1.......
134	6	0.0084	79.89	........11......
135	8	0.0331	76.46	........11......
138	6	0.0068	84.46	........11......
139	3	0.0233	12.64	........11......
[illegible]	4	0.0061	28.33	........1.......
142	11	0.0143	29.23	........11......
144	6	0.0038	27.08	........11......
145	2	0.0209	24.21	........11......
148	4	0.0306	25.16	.........1......
149	9	0.0105	21.52	..1.....11......
150	9	0.0288	34.19	........11......
151	4	0.0040	29.62	........11......
152	5	0.0435	21.19	........11......
153	6	0.0104	20.66	........11......
154	6	0.0223	20.38	........1.......
156	4	0.0064	22.98	.........1......
157	4	0.0091	23.09	..1.....11......
159	7	0.0053	25.27	........11......
160	6	0.0057	20.45	........11......
161	3	0.0028	26.43	........11......
162	6	0.0099	44.12	........11......
163	7	0.0375	14.35	........11......
164	4	0.0066	43.05	........11......
165	4	0.0083	26.36	........11......
169	6	0.0132	39.07	........11......
170	6	0.0210	38.91	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
171	6	0.0504	24.67	........11......
173	4	0.0051	30.77	........11......
174	4	0.0116	30.95	........11......
176	10	0.0239	14.27	........11......
177	2	0.0159	17.72	..1.....1.......
179	9	0.0189	30.61	..11....11......
180	7	0.0251	28.14	........11......
181	4	0.0219	29.76	........1.......
183	5	0.0095	18.01	..1.....11......
185	8	0.0381	16.33	........11......
187	7	0.0140	46.84	........11......
188	6	0.0470	23.98	........11......
189	4	0.0304	20.06	........11......
190	2	0.0210	24.15	........11......
191	6	0.0225	23.30	........11......
192	2	0.0083	20.11	..1.....11......
193	4	0.0059	43.59	........11......
195	5	0.0147	18.55	........11......
196	4	0.0060	35.89	........11......
197	4	0.0048	43.58	........11......
198	5	0.0130	18.46	........11......
201	2	0.0186	14.87	....
204	2	0.0531	12.05	..1.....1.......
205	13	0.0157	38.20	..1.....11......
207	7	0.0286	20.68	........11......
208	6	0.0269	33.80	........11......
209	10	0.0304	12.84	..1.....11......
211	2	0.0115	32.01	.........1......
213	1	0.0154	24.50	....
214	1	0.0129	38.81	.........1....1.
215	6	0.0652	14.95	........11......
216	9	0.0291	35.44	........11......
217	3	0.0083	17.74	..1.....11......
218	2	0.0053	19.15	.........1......
222	4	0.0122	27.58	........11......
223	8	0.0173	16.76	........11......
224	2	0.0295	12.84	..1.............
225	3	0.0161	16.74	.........1......
227	3	0.0139	17.87	........11......
228	1	0.0118	33.17	.........1......
229	2	0.0176	28.65	....
230	9	0.0205	24.44	..1.....11......
232	3	0.0068	14.02	........11......
233	6	0.0097	14.13	........11......
234	8	0.0069	25.30	........11......
236	6	0.0156	17.23	........11......
240	6	0.0331	15.27	........11......
241	10	0.0533	17.39	..11....11......
242	8	0.0591	28.69	........11......
243	6	0.0077	15.18	........11......
244	11	0.0245	14.17	........11......
246	4	0.0151	37.91	........11......
248	4	0.0067	38.86	........11......
252	5	0.0131	21.16	........11......
254	7	0.0697	21.99	........11......
255	7	0.0143	23.24	........11......
258	4	0.0142	29.38	........11......
259	2	0.0158	15.30	.........1......
260	10	0.0091	18.37	........11......
264	5	0.0119	22.21	..1.....11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
265	6	0.0443	31.65	..1.....11......
266	6	0.0141	19.73	........11......
267	3	0.0085	31.05	........11......
269	6	0.0527	24.14	..1.....11......
270	4	0.0235	27.16	..1.....11......
271	4	0.0059	28.75	........11......
272	6	0.0058	22.96	........11......
273	5	0.0191	24.04	........11......
274	7	0.0090	29.90	..1.....11......
275	8	0.0178	20.62	.........1......
276	2	0.0082	30.60	..1.....11......
277	2	0.0289	12.98	..1.....11......
278	6	0.0194	25.10	..1.....11......
279	3	0.0299	25.46	.........1......
280	5	0.0097	17.75	........11......
281	8	0.0162	16.41	........11......
282	5	0.0064	27.68	........1.......
284	4	0.0140	23.51	........11......
285	7	0.0230	18.74	........11......
286	5	0.0101	27.61	........11......
288	2	0.0165	32.71	........11......
289	9	0.0164	21.70	........11......
291	7	0.0333	25.26	........11......
294	8	0.0070	26.41	........11......
295	7	0.0171	14.37	..1.....11......
296	7	0.0005	7.90	..1.....11......
297	5	0.0021	7.58	........11....1.
298	4	0.0203	19.75	........11......
302	2	0.0033	29.16	.........1......
303	7	0.0152	29.40	........11......
305	11	0.0140	17.81	........11......
306	8	0.0136	36.08	.........1......
307	5	0.0071	26.22	........11......
310	3	0.0130	19.32	........1.......
311	1	0.0113	26.38	........1.......
312	2	0.0072	26.03	........11......
313	5	0.0031	23.86	........11......
314	3	0.0783	16.62	..1.....11......
315	4	0.0038	22.68	..1......1......
316	7	0.0098	22.23	........1.......
317	6	0.0824	24.30	........11......
318	2	0.0214	17.30	..1.....1.......
323	7	0.0161	27.57	..11....11......
324	4	0.0154	19.68	..1.....11......
325	4	0.0135	21.81	........1.......
327	9	0.0152	29.01	..1.....11......
328	5	0.0031	23.79	........1.......
331	2	0.0166	19.02	.........1......
332	4	0.0160	21.43	........11......
333	5	0.0053	22.24	..1.....11......
336	2	0.0084	26.77	........11......
340	2	0.0093	26.20	........11......
343	9	0.0079	19.66	........11......
344	2	0.0206	24.37	..1......1......
345	2	0.0302	20.12	........11......
346	2	0.0073	25.90	........11......
348	4	0.0079	23.33	........11......
350	6	0.0084	24.02	..1.....11......
352	8	0.0164	15.37	........11......
355	4	0.0037	22.80	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
356	7	0.0158	18.12	........11......
357	4	0.0078	19.81	........1.......
360	7	0.0206	16.47	........11......
361	1	0.0124	37.19	.........1......
363	6	0.0229	23.13	........11......
364	4	0.0146	33.36	........11......
365	2	0.0276	21.06	........11......
369	1	0.0050	23.58	........1.......
372	7	0.0046	25.74	........11......
374	5	0.0159	28.99	........11......
375	5	0.0090	23.25	........11......
376	5	0.0123	25.09	..1.....11......
377	2	0.0024	34.00	.........1......
378	4	0.0029	16.37	........11......
379	3	0.0012	24.87	........11......
381	2	0.0057	23.15	..1.....1.......
382	8	0.0080	19.60	........11......
383	2	0.0015	34.00	........1.......
385	4	0.0062	20.56	........11......
387	4	0.0008	24.57	........11......
389	5	0.0054	22.85	..1.....11......
390	7	0.0022	23.82	........11......
391	7	0.0018	25.20	........11......
392	2	0.0029	28.42	........1.......
393	4	0.0288	20.62	..1.....11......
394	4	0.0367	22.65	........1.......
395	5	0.0221	23.51	........11......
398	6	0.0195	39.67	........11......
399	5	0.0472	24.37	........11......
401	3	0.0301	31.94	........11......
403	8	0.0154	15.27	........11......
405	3	0.0173	16.75	........11......
406	6	0.0134	15.14	........11......
407	5	0.0255	17.40	........11......
410	4	0.0056	29.37	........11......
411	5	0.0337	19.05	........11......
412	10	0.0184	12.90	..1.....11......
413	13	0.0411	13.70	..1.....11......
415	7	0.0082	24.43	..1.....11......
416	9	0.0056	29.54	........11......
417	3	0.0014	37.47	........1.......
418	5	0.0030	38.44	........11......
421	9	0.0125	10.91	........11......
422	8	0.0105	13.60	........11......
423	4	0.0042	53.86	........11......
424	4	0.0169	16.95	........11......
425	6	0.0008	31.66	........11......
426	8	0.0141	15.90	........11......
427	9	0.0096	11.53	........11......
428	4	0.0049	18.91	........11......
429	2	0.0068	14.52	........11......
430	4	0.0025	30.31	........11......
431	7	0.0023	17.05	........11......
433	4	0.0236	18.06	........11......
434	6	0.0102	27.50	........11......
435	4	0.0045	20.12	........11......
436	7	0.0120	15.99	........11......
437	4	0.0094	28.66	........11......
438	2	0.0065	20.98	........11......
440	9	0.0427	10.10	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
441	3	0.0270	13.43	........11......
444	2	0.0004	16.70	........1.......
446	7	0.0163	17.29	........11......
447	8	0.0172	26.68	........11......
449	8	0.0063	34.95	........11......
450	7	0.0138	20.58	........11......
451	4	0.0080	44.59	........11......
452	2	0.0062	20.74	........11......
453	2	0.0099	17.60	........11......
455	3	0.0076	15.99	..1.....11......
456	3	0.0071	17.82	........11......
457	4	0.0181	13.03	.........1......
458	10	0.0065	41.27	........11......
459	2	0.0404	13.81	..1.....1.......
460	3	0.0548	15.01	..1.....11......
461	6	0.0218	22.18	........11......
462	3	0.0195	21.42	..1.....11......
463	12	0.0062	46.53	........11......
464	6	0.0194	39.10	..1.....11......
467	3	0.0128	15.51	........11......
468	6	0.0270	13.42	........11......
469	2	0.0119	25.47	........11......
470	3	0.0150	20.41	........11......
473	2	0.0303	15.95	........11......
475	8	0.0190	16.00	........11......
477	1	0.0122	21.58	........1.......
478	4	0.0252	23.19	........11......
482	2	0.0322	17.69	........1.......
483	2	0.0278	33.21	.........1......
484	2	0.0173	28.49	........11......
485	4	0.0097	22.36	....
486	2	0.0156	37.55	........11......
488	5	0.0188	16.11	........11......
492	2	0.0341	23.83	..1......1......
494	4	0.0098	22.27	........11......
495	5	0.0116	30.96	........11......
496	1	0.0030	27.50	....
497	6	0.0060	22.55	........11......
498	5	0.0200	14.88	........11......
499	5	0.0039	25.44	........11......
500	3	0.0241	20.45	.........1....1.
501	3	0.0089	16.24	........11......
502	6	0.0263	17.12	.........1......
503	2	0.0095	35.87	........11......
504	4	0.0077	30.16	..1.....11......
505	6	0.0051	21.91	.........1......
508	10	0.0287	12.90	..1.....11......
509	9	0.0081	24.51	........11......
510	9	0.0215	12.53	..11....11......
511	2	0.0143	25.42	....
514	6	0.0027	26.99	........11......
515	6	0.0172	18.60	........11......
517	7	0.0203	25.34	........11......
518	6	0.0055	27.05	........11......
519	4	0.0004	42.60	........11......
520	7	0.0593	14.76	........11......
522	9	0.0132	21.16	........11......
524	9	0.0210	15.42	........11......
525	6	0.0235	31.45	........1.......
526	5	0.0220	29.69	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
527	5	0.0183	12.20	........11......
528	8	0.0064	17.40	........11......
529	4	0.0211	28.95	........1.......
530	4	0.0100	30.88	........11......
531	4	0.0067	34.05	........11......
532	5	0.0137	27.20	........11......
533	7	0.0046	20.60	........11......
534	6	0.0128	34.01	........11......
535	7	0.0295	32.27	.........1......
538	5	0.0088	46.98	........11......
540	7	0.0051	31.02	........11......
541	6	0.0064	36.49	..1.....11......
542	9	0.0003	15.07	........11......
543	6	0.0136	15.01	........11......
545	8	0.0243	15.73	........11......
547	10	0.0344	14.04	........11......
548	6	0.0223	14.77	........11......
549	2	0.0041	21.81	.........1......
550	6	0.0017	21.60	........11......
551	6	0.0415	17.17	........11......
552	7	0.0078	19.86	........11......
553	8	0.0120	24.31	........11......
554	5	0.0549	18.79	........11......
555	2	0.0044	26.34	.........1....1.
556	2	0.0073	16.32	........1.......
559	2	0.0197	24.94	..1.....11......
560	2	0.0098	17.73	........11......
565	2	0.0325	24.40	..1.....1.......
566	4	0.0106	33.98	........11......
567	5	0.0133	24.07	........11......
568	5	0.0074	20.30	........11......
570	2	0.0197	19.78	..1.....11......
571	6	0.0013	38.21	........11......
572	3	0.0046	18.02	..1.....11......
573	6	0.0043	26.75	........11......
575	6	0.0217	16.41	........11......
576	2	0.0067	33.95	........1.......
577	6	0.0185	24.01	........11......
579	5	0.0048	25.37	.........1......
580	2	0.0040	26.54	........1.......
582	11	0.0030	31.77	........11......
583	5	0.0045	32.93	........11......
584	2	0.0057	29.13	.........1......
586	4	0.0037	30.62	........11......
588	2	0.0030	23.18	....
592	5	0.0048	20.04	........11......
593	2	0.0054	18.85	.........1......
594	2	0.0024	24.84	.........1......
596	4	0.0104	24.87	........11......
598	2	0.0076	20.07	..1.....11......
599	4	0.0152	22.56	........11......
600	3	0.0022	22.73	.........1......
602	6	0.0249	17.59	........11......
604	2	0.0102	26.22	..1......1......
605	6	0.0023	43.75	..11....11......
607	6	0.0017	21.45	........11......
608	4	0.0035	37.49	........11......
609	4	0.0046	32.49	........11......
610	2	0.0020	15.76	.........1......
611	3	0.0020	15.64	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
612	3	0.0013	24.77	........11......
615	6	0.0038	22.51	........11......
616	2	0.0009	22.89	..1.....1.......
618	2	0.0024	14.27	........1.......
619	2	0.0020	15.69	....
622	3	0.0017	27.20	........11......
623	2	0.0020	24.42	........11......
624	3	0.0004	28.32	........11......
625	2	0.0014	23.75	........11......
626	7	0.0004	27.76	........11......
627	2	0.0136	18.94	..1......1......
628	2	0.0017	26.57	........1.......
629	1	0.0019	20.40	.........1......
630	8	0.0018	20.93	........11......
632	2	0.0054	15.02	........11......
633	3	0.0018	21.85	........11......
635	5	0.0012	31.36	........11......
636	2	0.0047	27.88	.........1......
637	5	0.0042	21.59	........11......
638	6	0.0025	27.90	........11......
639	2	0.0017	26.79	........11.....1
641	5	0.0050	23.02	........11......
642	5	0.0059	13.72	........1.......
645	2	0.0019	22.37	..1.............
646	2	0.0026	22.98	........1.......
647	2	0.0022	23.54	........11......
648	2	0.0021	21.08	........11......
649	2	0.0032	24.47	........1.......
651	6	0.0018	41.32	.........1......
652	5	0.0024	35.43	........11......
653	6	0.0011	25.99	........11......
654	2	0.0060	15.50	..1.....11......
655	9	0.0032	30.62	........11......
656	4	0.0011	23.78	........11......
657	5	0.0012	25.09	........11......
658	4	0.0138	12.72	........11......
659	2	0.0023	14.61	........11......
661	3	0.0061	14.12	........11......
662	2	0.0015	22.41	........1.......
663	2	0.0035	14.83	..1.....11......
664	7	0.0042	17.12	........11......
665	3	0.0035	14.84	........1.......
666	2	0.0056	27.24	........11......
667	2	0.0010	22.11	........1.......
669	2	0.0127	19.60	........11......
670	8	0.0120	31.58	........11......
671	2	0.0008	24.95	..1.....11......
672	6	0.0108	13.41	........11......
673	6	0.0295	12.84	........11......
674	6	0.0012	42.23	........11......
675	4	0.0039	35.48	........11......
676	7	0.0043	33.65	........11......
677	4	0.0019	25.26	........11......
678	6	0.0137	27.59	........11......
679	4	0.0028	29.55	........11......
680	7	0.0129	19.46	........11......
683	10	0.0051	38.91	........11......
684	6	0.0054	30.00	........11......
685	3	0.0067	16.99	.........1......
686	2	0.0008	24.66	..1.....11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW 1111111 1234567890123456
687	8	0.0028	33.31	........11......
689	6	0.0030	25.42	........11......
690	6	0.0016	27.33	........11......
692	3	0.0038	11.33	..1.....11......
693	2	0.0024	28.18	........11......
695	6	0.0030	25.37	........11......
697	7	0.0014	39.38	........11......
698	7	0.0027	25.66	........11......
699	8	0.0028	35.70	........11......
701	9	0.0569	18.45	........11......
702	3	0.0039	11.17	.........1......
704	6	0.0117	25.65	........11......
705	7	0.0330	13.76	........11......
708	4	0.0009	36.16	........11......
710	6	0.0031	30.19	........11......
711	2	0.0006	23.31	..1.....11......
712	7	0.0112	15.82	........11......
713	2	0.0019	25.47	........11......
714	3	0.0141	20.37	........11......
715	2	0.0019	25.51	..1.............
716	6	0.0148	14.41	........11......
717	4	0.0077	25.11	........11......
719	2	0.0033	21.26	........11......
720	8	0.0038	22.44	........11......
721	6	0.0012	22.74	........11......
723	4	0.0047	28.13	........11......
724	6	0.0016	27.81	........11......
726	4	0.0111	26.69	........11......
727	5	0.0102	21.87	........11......
728	3	0.0016	21.63	........11......
729	2	0.0063	19.01	........1.......
730	6	0.0015	22.45	........11......
731	6	0.0214	23.90	........11......
732	8	0.0049	34.49	........11......
734	2	0.0064	27.64	........11......
735	6	0.0055	14.97	........11......
736	3	0.0005	24.67	..1......1......
737	2	0.0042	26.90	........11......
738	4	0.0011	32.88	........11......
739	2	0.0051	23.39	..1.....11......
741	2	0.0010	22.43	........11......
742	3	0.0020	24.63	..1.....11......
744	4	0.0080	33.42	........11......
745	6	0.0037	26.26	........11......
746	2	0.0116	21.24	..1.............
747	2	0.0084	24.12	....
750	6	0.0028	20.89	........11......
751	7	0.0014	18.92	........11......
753	2	0.0008	25.45	....
754	4	0.0015	31.16	........11......
757	3	0.0046	16.27	.........1......
758	4	0.0019	29.06	........11......
759	5	0.0057	23.26	........11......
761	2	0.0352	19.51	....
763	7	0.0078	22.67	........11......
764	3	0.0087	21.30	........11......
765	5	0.0047	25.52	........11......
766	4	0.0051	24.54	........11......
767	4	0.0052	22.25	........11......
768	2	0.0040	23.16	........11......
770	2	0.0017	21.40	....
771	3	0.0013	15.36	..1......1......
772	6	0.0021	38.37	........11......
773	5	0.0255	24.11	........11......
774	2	0.0010	27.14	....
775	2	0.0098	16.88	..1.....11......
776	5	0.0170	16.92	........11......
777	2	0.0043	16.93	........11......
779	4	0.0022	35.63	........11......
780	5	0.0018	16.40	........11......
781	3	0.0014	23.37	........1.......
782	6	0.0019	37.96	........11......
783	6	0.0021	19.27	........11......
785	10	0.0065	27.30	........11....1.
786	4	0.0024	22.49	........11......
787	5	0.0017	21.31	........11......
788	3	0.0030	16.06	........11......
790	2	0.0049	25.06	..1.....11......
791	2	0.0008	24.38	........1.......
792	2	0.0044	21.00	..1.....1.......
793	2	0.0016	21.70	........11......
795	7	0.0025	33.95	........11......
796	8	0.0064	11.58	........11......
797	4	0.0097	28.14	........1.......
798	2	0.0030	25.22	..1.....1.......
799	1	0.0121	25.22	....
802	2	0.0025	21.93	..1.............
803	7	0.0072	16.35	........11......
804	7	0.0023	10.93	........11......
805	8	0.0004	16.72	........11......
807	2	0.0010	22.38	........11......
808	7	0.0017	26.56	........11....1.
809	7	0.0152	35.73	........11......
810	2	0.0061	22.08	........11......
811	4	0.0010	21.88	........11......
812	8	0.0131	30.54	........11......
813	6	0.0010	22.12	........11......
814	6	0.0074	20.36	........11......
815	3	0.0043	26.74	.........1......
816	2	0.0253	23.53	..1.....1.......
818	4	0.0008	24.07	.........1......
822	4	0.0026	27.18	........11......
823	7	0.0033	24.29	........11......
824	2	0.0027	26.61	.........1......
825	2	0.0023	29.30	........11......
826	2	0.0010	24.73	..1.............
827	7	0.0044	23.59	........11....1.
828	8	0.0006	36.08	........11......
829	4	0.0013	30.69	.........1......
830	4	0.0030	25.26	........11......
831	9	0.0089	20.60	........11......
833	3	0.0043	21.24	........11......
834	3	0.0022	26.95	........11......
836	6	0.0012	19.98	........11......
837	7	0.0016	21.65	........11......
839	4	0.0005	25.33	........11......
840	2	0.0089	19.45	........11......
841	4	0.0013	31.18	........1.......
842	4	0.0031	24.95	........11......
843	9	0.0101	33.90	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
844	1	0.0024	17.93	....
845	6	0.0015	28.21	........11......
846	8	0.0122	14.34	........11......
848	6	0.0133	31.75	........1.......
851	2	0.0020	27.86	....
852	2	0.0004	23.32	..1.....11......
853	2	0.0033	12.06	..1.....11......
854	2	0.0093	27.56	..1.....11......
855	3	0.0004	23.43	..1.....11......
857	4	0.0014	37.65	........11......
860	4	0.0014	35.85	........1.......
862	6	0.0090	29.24	........11......
863	6	0.0068	33.74	........11......
864	6	0.0033	24.06	........11......
865	2	0.0012	25.08	........11....1.
866	5	0.0018	41.00	..1.....11......
867	4	0.0020	30.95	........11......
868	2	0.0014	18.79	........1.......
870	2	0.0037	22.92	....
874	4	0.0033	48.53	........1.......
876	5	0.0142	23.31	........11......
878	2	0.0113	20.79	........11......
879	6	0.0071	26.22	........11......
880	2	0.0036	29.32	........11......
882	2	0.0043	29.15	..1.....1.......
885	4	0.0130	32.60	....
886	7	0.0116	25.80	........11......
888	6	0.0163	21.74	........11......
890	3	0.0058	28.11	........11......
891	4	0.0118	32.13	.........1......
892	4	0.0041	27.26	........11......
893	4	0.0045	24.81	........1.......
894	6	0.0110	26.44	........11......
895	3	0.0286	21.63	........11......
896	6	0.0145	36.52	..1......1......
897	7	0.0321	28.74	........11......
898	2	0.0232	36.41	....
899	5	0.0066	28.01	........11......
900	6	0.0146	28.98	........11......
901	4	0.0101	34.71	........11......
902	4	0.0486	31.63	..1.....11......
905	4	0.0110	31.71	........11......
906	4	0.0133	24.09	........1.......
907	6	0.0106	26.67	........11......
908	6	0.0154	22.35	.........1......
912	6	0.0083	21.92	........11......
913	4	0.0445	26.26	..1......1......
914	2	0.0208	30.54	..1.....1.......
915	2	0.0147	30.24	.........1......
916	2	0.0069	33.43	.........1......
917	4	0.0149	41.01	........11......
918	4	0.0138	29.72	........11......
919	6	0.0041	27.49	........11......
920	4	0.0082	38.56	........11......
921	4	0.0334	38.17	........11......
922	6	0.0013	31.17	........11......
924	8	0.0198	31.30	........11......
925	4	0.0099	44.21	........11......
926	4	0.0116	25.77	........11......
928	9	0.0147	22.93	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
929	6	0.0087	29.80	........11......
930	3	0.0068	26.82	........11......
932	4	0.0136	35.07	........11......
934	4	0.0065	43.32	........11......
935	6	0.0175	21.02	........11......
936	4	0.0309	31.51	........1.......
937	2	0.0048	40.12	....
938	2	0.0036	25.46	....
939	4	0.0165	43.19	........11......
941	7	0.0109	22.01	........11......
942	8	0.0126	31.10	........11......
943	5	0.0418	34.10	........11......
944	8	0.0089	29.41	........11......
945	14	0.0138	25.41	........11......
946	9	0.0094	20.76	..1.....11......
947	14	0.0094	22.78	........11......
949	6	0.0124	19.85	........11......
950	9	0.0127	27.91	........11......
951	7	0.0101	34.76	..1.....11......
952	9	0.0042	20.42	........11......
953	6	0.0093	17.32	........11......
954	7	0.0174	21.07	..11....11.....
955	8	0.0130	19.36	........11......
956	5	0.0118	20.28	........11......
958	4	0.0088	24.53	........11......
959	6	0.0162	18.55	........11......
963	7	0.0437	26.50	........11......
964	5	0.0155	18.45	........11......
965	1	0.0279	11.82	....
967	2	0.0048	21.09	........11......
968	2	0.0087	25.29	.........1......
971	2	0.0438	26.48	.........1......
972	3	0.0080	24.71	........11......
974	2	0.0041	27.39	........11......
975	2	0.0327	19.35	........11......
977	2	0.0041	24.93	........1.......
984	2	0.0259	20.66	..1.....11......
985	2	0.0084	26.47	........1.......
987	2	0.0021	30.60	........1.......
992	2	0.0208	30.54	..1.....11......
1002	1	0.0172	26.64	........1.......
1006	2	0.0188	33.13	........1.......
1007	2	0.0176	31.97	........11......
1010	3	0.0129	30.78	........11......
1014	2	0.0109	29.00	........1.......
1015	1	0.0119	25.50	........1.......
1017	2	0.0354	24.37	........11......
1018	3	0.0224	29.39	........11......
1020	2	0.0111	31.65	....
1021	2	0.0058	34.90	.........1......
1022	2	0.0277	20.99	........11......
1025	2	0.0095	18.76	........11......
1026	2	0.0251	24.99	........1.......
1027	3	0.0159	27.70	.........1......
1029	2	0.0160	28.93	........1.......
1031	2	0.0359	23.24	........11......
1033	1	0.0130	19.38	.........1......
1034	2	0.0139	28.36	........11......
1035	2	0.0026	34.97	........11......
1037	2	0.0105	14.75	........1.......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
1041	2	0.0365	18.31	....
1043	3	0.0154	35.48	........11......
1045	5	0.0345	23.68	..1.....1.......
1047	6	0.0525	17.61	........11......
1048	7	0.0311	13.91	........1.......
1049	7	0.0463	17.74	........11......
1050	7	0.0138	13.74	........11......
1051	5	0.0282	13.13	........11......
1053	7	0.0299	15.33	........11......
1055	6	0.0355	18.55	..1.....11......
1057	4	0.0626	20.21	........11......
1059	4	0.0615	20.00	........11......
1060	5	0.0299	15.12	........11......
1063	7	0.0200	15 60	........11......
1064	4	0.0225	25.81	........11......
1066	2	0.0191	19.20	........11......
1068	6	0.0175	16.67	........1.......
1075	7	0.1734	0.53	........11......
1077	7	0.0569	16.45	........11......
1083	7	0.0427	13.44	........11......
1086	5	0.0599	11.35	........11......
1087	3	0.0199	15.64	........1.......
1088	5	0.0220	12.94	........11......
1090	2	0.0118	25.59	........1.......
1092	3	0.0118	20.27	.........1......
1093	5	0.0115	12.41	........11......
1096	8	0.0276	13.79	........11......
1099	2	0.0215	19.84	........1.......
1100	6	0.0958	15.81	........11......
1101	7	0.0017	15.64	........11......
1102	9	0.0476	11.66	........11......
1103	6	0.0261	15.67	........1.......
1104	4	0.0350	15.98	........11......
1112	9	0.0721	10.34	........11......
1115	2	0.0349	14.53	.........1......
1116	2	0.0425	21.75	........1.......
1117	2	0.0383	14.86	....
1118	3	0.0291	14.86	.........1......
1121	4	0.0099	14.78	.........1......
1122	2	0.0500	24.79	........11......
1127	2	0.0029	16.21	........11......
1129	2	0.0105	21.49	........11......
1130	1	0.0182	13.30	....
1131	2	0.0407	22.84	........1.......
1132	3	0.0170	16.90	........11......
1133	2	0.0085	23.86	........11......
1134	2	0.0194	15.83	.........1......
1135	3	0.0252	27.73	........11......
1137	4	0.0097	44.74	..1.....11......
1139	3	0.0234	25.63	........11....1.
1140	1	0.0158	22.10	........1.......
1143	2	0.0097	22.06	.........1......
1152	4	0.0103	21.75	..1.....11......
1154	5	0.0014	29.76	........11......
1155	4	0.0144	30.14	........11......
1156	4	0.0239	28.35	........11......
1157	8	0.0218	23.66	........11......
1158	10	0.0149	28.64	..1.....11......
1160	6	0.0145	18.30	........1.......
1163	9	0.0163	23.88	........11......
1164	7	0.0109	23.78	........11......
1167	5	0.0038	22.71	..1.....1.......
1169	5	0.0058	23.00	........11......
1170	6	0.0102	21.86	........11......
1175	7	0.0094	22.76	........11......
1177	8	0.0127	24.65	........11......
1178	6	0.0184	20.48	.........1......
1181	9	0.0095	28.52	........11......
1186	6	0.0192	30.36	........11......
1187	7	0.0134	21.90	........11......
1190	6	0.0196	23.86	........11......
1191	8	0.0119	22.19	........11......
1192	3	0.0057	23.12	........11......
1195	4	0.0061	21.42	.........1......
1196	6	0.0108	21.27	.........1......
1197	4	0.0122	19.96	........11......
1198	10	0.0255	16.61	........11......
1200	6	0.0090	23.24	........11......
1202	9	0.0258	14.45	........11......
1204	3	0.0566	29.33	........11......
1207	8	0.0124	23.77	........11......
1208	6	0.0119	18.44	........11......
1210	3	0.0252	34.87	........11......
1211	6	0.0067	26.96	........11......
1212	4	0.0244	17.85	........1.......
1213	6	0.0289	32.59	..1.....11......
1214	2	0.0084	29.01	..1.....11......
1215	10	0.0150	35.99	........11......
1216	2	0.0081	19.74	..1......1......
1217	2	0.0030	31.97	........1.......
1218	2	0.0136	16.47	..1......1......
1220	4	0.0113	34.24	........11......
1221	4	0.0106	26.91	........11......
1222	5	0.0029	26.42	........11....1.
1223	4	0.0049	31.44	........11......
1224	5	0.0166	22.99	........11......
1225	6	0.0057	46.42	........11......
1226	3	0.0203	15.46	........11......
1227	2	0.0190	22.50	........11......
1228	3	0.0096	22.40	........11......
1231	5	0.0066	34.08	........11......
1232	1	0.0057	38.19	....
1233	5	0.0108	26.70	........11......
1235	4	0.0108	38.70	........11......
1238	7	0.0085	19.04	........11......
1239	7	0.0019	33.66	........11......
1241	4	0.0034	37.64	........11......
1243	4	0.0076	12.65	........11......
1245	8	0.0127	25.32	..1.....11......
1246	4	0.0074	27.18	........11......
1247	6	0.0220	19.86	........11......
1248	4	0.0063	44.02	........11......
1249	6	0.0184	14.17	....11......
1250	4	0.0016	35.00	........1.......
1254	4	0.0048	42.30	........11......
1255	4	0.0038	34.36	........11......
1256	4	0.0071	43.53	........11......
1257	6	0.0205	31.44	........11......
1258	4	0.0042	25.79	.........1......
1259	4	0.0021	24.11	..1.....11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
1261	4	0.0073	25.74	........11......
1262	7	0.0105	21.51	..1.....11......
1263	4	0.0059	28.60	........1.......
1266	11	0.0185	12.89	........11......
1267	4	0.0102	34.69	.........1......
1270	7	0.0187	27.03	........11......
1271	4	0.0180	32.79	........11......
1272	6	0.0119	26.82	........11......
1274	6	0.0272	29.37	........11......
1275	5	0.0135	18.96	........11......
1276	4	0.0096	28.38	........11......
1277	7	0.0128	16.21	........11......
1278	5	0.0252	84.47	........11......
1279	4	0.0067	21.43	........11......
1280	8	0.0446	12.86	........11......
1281	3	0.0045	32.96	........11......
1283	4	0.0079	29.85	........11......
1284	2	0.0074	25.71	..1.....11......
1285	9	0.0126	31.10	........11......
1286	4	0.0215	37.76	........11......
1287	4	0.0263	17.94	........11......
1288	8	0.0231	34.65	........11......
1289	4	0.0074	25.73	........11......
1290	4	0.0088	22.15	....
1291	4	0.0202	35.53	........11......
1292	4	0.0100	33.42	........11......
1294	4	0.0111	33.23	........11......
1295	4	0.0089	40.54	....
1296	3	0.0051	24.46	........11......
1297	8	0.0262	34.7;	........11......
1300	10	0.0265	27.02	........11......
1302	9	0.0045	44.24	........11......
1303	3	0.0179	13.11	........11......
1305	6	0.0568	17.80	........11......
1306	6	0.0481	12.66	..1.....11......
1307	7	0.0205	24.45	..1.....11......
1309	8	0.0049	31.58	........11......
1312	6	0.0093	26.69	........11......
1314	12	0.0039	23.59	........11......
1315	4	0.0069	29.03	........11......
1316	4	0.0002	58.23	........1.......
1318	6	0.0248	17.63	........11......
1319	8	0.0339	18.98	..1.....11......
1324	8	0.0127	19.59	..1.....11......
1327	6	0.0087	23.61	........11......
1329	9	0.0075	12.27	..1.....11......
1331	7	0.0198	15.66	........11......
1332	7	0.0000	54.02	..1.....11......
1333	6	0.0285	13.06	........11......
1334	2	0.0090	38.64	..1.....11......
1335	8	0.0272	12.08	........11......
1338	2	0.0545	18.85	........1.......
1341	6	0.0203	30.90	..1.....11......
1342	2	0.0051	18.62	........1.......
1343	2	0.0186	40.58	..1.....11......
1344	6	0.0222	37.21	........11......
1345	9	0.0115	41.11	..1.....11....1.
1346	3	0.0179	20.76	....
1349	4	0.0214	18.98	........11......
1350	5	0.0095	23.41	........11....1.

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
1351	2	0.0171	20.67	..1.....11......
1352	7	0.0250	13.19	........11......
1354	2	0.0219	29.75	.........1......
1356	3	0.0517	16.70	........11......
1357	1	0.0099	16.86	.........1......
1358	6	0.0233	14.47	........11......
1359	6	0.0068	40.51	..1.....11......
1360	6	0.0067	42.87	........11......
1361	3	0.0310	14.32	........11......
1362	3	0.0101	28.38	..1.....11......
1363	6	0.0273	13.30	........11......
1366	6	0.0311	17.04	........11......
1367	4	0.0144	33.49	..1......1......
1368	2	0.0129	24.43	..1.....11......
1369	2	0.0149	36.06	..1......1......
1371	4	0.0001	90.59	........11......
1374	1	0.0186	19.44	.........1......
1377	3	0.0237	19.14	........11......
1378	2	0.0235	27.53	....
1379	3	0.0161	13.82	..1.....11......
1380	5	0.0714	20.74	........11......
1381	3	0.0234	14.44	..1.....11......
1382	2	0.0085	21.67	.........1......
1383	2	0.0252	18.31	..1.....11......
1384	3	0.0446	12.55	..1.....11......
1385	2	0.0145	17.58	........11......
1386	4	0.0224	18.83	........1.......
1389	6	0.0554	11.79	........11......
1390	6	0.0191	34.95	........11......
1392	4	0.0181	26.01	..1.....11......
1393	2	0.0488	25.10	.........1......
1394	2	0.0398	13.92	..1.............
1395	3	0.0203	12.29	........11......
1397	2	0.0337	23.11	........1.......
1398	4	0.0485	31.69	..1.....11......
1399	8	0.0222	18.63	........11......
1400	2	0.0224	24.49	..1.....1.......
1403	4	0.0306	30.00	........1.......
1405	2	0.0325	12.88	........11......
1407	2	0.0250	16.77	..1.....11......
1408	3	0.0210	15.22	.........1......
1410	2	0.0606	10.67	..1.....11......
1411	3	0.0474	13.86	........11......
1412	2	0.0138	18.75	.........1......
1413	6	0.0507	11.25	........11......
1414	2	0.0142	20.19	........1.......
1418	7	0.0312	32.84	........11......
1419	2	0.0071	31.40	........1.......
1420	6	0.0204	23.26	........11......
1422	2	0.0200	13.15	.........1......
1423	10	0.0096	19.66	........11......
1424	7	0.0423	11.55	........11......
1425	2	0.0263	13.47	..1.....11......
1427	8	0.0114	15.77	........11......
1433	12	0.0670	13.95	..1.....11......
1434	5	0.0179	25.33	........11......
1437	2	0.0232	15.02	........1.......
1438	3	0.0228	18.39	........11......
1440	8	0.0576	11.57	........11......
1441	5	0.0156	32.12	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
1442	4	0.0244	20.05	........11......
1443	6	0.0092	20.06	..1.....11......
1445	5	0.0170	40.56	........11......
1448	10	0.0163	13.73	........11......
1449	6	0.0322	30.89	..1.....11......
1450	5	0.0258	21.77	........11......
1455	7	0.0681	21.24	........11......
1458	6	0.0217	36.11	..1.....11......
1459	5	0.0282	20.81	........11......
1460	6	0.0168	33.94	........11......
1464	10	0.0446	19.18	........11......
1467	4	0.0160	21.96	........11......
1468	6	0.0426	26.85	........11......
1469	7	0.0202	20.27	..1.....11......
1472	20	0.0004	14.75	........11......
1477	2	0.0001	24.37	..1.............
1478	3	0.0204	30.79	..1.....11......
1479	2	0.0000	32.25	..1.............
1480	2	0.0200	22.57	........1.......
1481	9	0.0217	15.68	..11....11......
1482	12	0.0113	16.45	..1.....11......
1483	2	0.0017	26.71	.........1......
1484	5	0.0354	14.75	..1.....11......
1485	15	0.0477	14.60	..1.....11......
1486	6	0.0162	14.10	........11......
1487	2	0.0172	26.02	..1.....11......
1491	12	0.0086	20.44	..1.....11......
1492	2	0.0611	35.54	..1.....11......
1494	6	0.0274	13.32	........11......
1495	2	0.0249	27.88	........11......
1499	2	0.0120	40.10	........11......
1501	2	0.0169	42.61	........11......
1502	4	0.0061	32.49	........11......
1503	2	0.0353	26.88	........11......
1504	2	0.0289	41.07	........11......
1505	6	0.0276	20.11	........11......
1507	6	0.0193	12.61	........11......
1508	2	0.0425	21.35	........11......
1510	2	0.0303	27.23	..1.....11......
1512	2	0.0004	52.43	........11......
1514	6	0.0379	17.97	........11......
1515	8	0.0349	18.71	........11......
1519	7	0.0163	17.51	..1.....11......
1520	4	0.0202	20.48	........11......
1521	7	0.0174	18.36	........11......
1522	4	0.0001	27.06	........11......
1523	4	0.0205	16.90	........11......
1524	7	0.0087	18.84	........11......
1525	6	0.0433	16.81	........11......
1526	7	0.0382	12.43	........11......
1527	9	0.0068	16.85	..1.....11......
1529	9	0.0353	13.47	..1.....11......
1530	7	0.0389	16.70	........11......
1531	2	0.0094	36.14	..1......1......
1532	2	0.0211	30.28	........11......
1533	5	0.1186	32.10	........11......
1535	7	0.0117	25.68	..1.....11......
1536	4	0.0061	71.00	........11......
1537	3	0.0125	24.87	........1.......
1538	7	0.0144	17.55	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
1540	7	0.0225	14.12	........11......
1541	4	0.0127	31.06	.........1......
1544	6	0.0163	34.52	........11......
1545	4	0.0302	15.99	........11......
1546	8	0.0509	12.90	..11....11......
1547	2	0.0188	16.07	....
1548	6	0.0380	15.91	........11......
1549	2	0.0162	17.36	.........1......
1550	4	0.0218	14.95	........11......
1551	8	0.0352	15.80	........11......
1552	10	0.0155	22.33	..1.....11......
1553	9	0.0342	15.01	..1.....11......
1554	9	0.0341	15.97	........11......
1555	10	0.0206	13.39	........11......
1556	9	0.0184	20.46	........11......
1557	2	0.0340	23.86	.........1......
1560	2	0.0335	20.95	........1.......
1561	2	0.0254	18.25	..1.....1.......
1562	6	0.0196	36.07	..1.....11......
1564	4	0.0192	20.06	........11......
1566	2	0.0206	30.67	....
1567	5	0.0128	27.95	........11......
1568	10	0.0061	14.86	........11......
1569	2	0.0313	24.86	........11......
1572	2	0.0222	23.45	........1.......
1574	2	0.0252	17.49	..1.....11......
1575	6	0.0158	87.85	..1.....11......
1576	2	0.0555	20.12	.........1......
1577	5	0.0553	18.72	........11......
1578	7	0.0634	22.00	........11......
1579	3	0.0265	13.55	........11......
1580	3	0.0312	27.94	........11......
1581	2	0.0139	18.70	........11......
1582	5	0.0356	14.72	........11......
1584	5	0.0199	31.20	.........1......
1588	7	0.0359	16.67	........11......
1589	2	0.0317	24.72	..1......1......
1593	5	0.0277	83.66	........11......
1594	8	0.0240	35.77	........11......
1595	4	0.0397	31.93	........11......
1597	2	0.0089	21.28	........11......
1598	2	0.0189	20.20	..1.....11......
1599	3	0.0326	18.15	........11......
1604	7	0.0111	41.78	........11......
1606	3	0.0422	17.03	........1.......
1608	2	0.0362	13.88	........1.......
1609	2	0.0432	16.81	........1.......
1610	3	0.0399	22.05	........11......
1611	7	0.0628	11.50	........11......
1613	4	0.0293	13.49	........11......
1614	2	0.0120	25.40	.........1......
1616	4	0.0103	27.33	..1.....11......
1617	1	0.0197	18.02	........1.......
1622	4	0.0207	27.88	........11......
1624	2	0.0338	19.02	..1.....11......
1625	2	0.0285	17.86	.........1......
1626	4	0.0186	33.05	........11......
1627	8	0.0128	15.48	........11......
1628	7	0.0213	18.16	........11......
1630	4	0.0154	28.22	........1.......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
1632	14	0.0219	14.91	........11......
1635	11	0.0020	4.91	........11......
1639	2	0.0202	19.56	........1.......
1640	6	0.0433	17.43	........11......
1641	3	0.0143	23.24	........11......
1643	2	0.0397	16.30	.........1......
1644	12	0.0276	13.27	..1.....11......
1645	6	0.0023	14.65	........11......
1646	7	0.0389	29.98	........11......
1647	1	0.0116	25.82	........1.......
1648	8	0.0519	19.33	........11......
1649	4	0.0248	11.12	........11......
1652	4	0.0121	39.98	.........1......
1653	3	0.0109	26.08	........11......
1654	4	0.0724	28.55	........11......
1655	7	0.0085	30.08	..1.....11......
1656	5	0.0091	23.07	........11......
1657	3	0.0206	24.38	........11......
1658	4	0.0087	31.07	........11......
1659	4	0.0117	32.35	........11......
1660	4	0.0255	25.61	........11......
1662	2	0.0119	29.42	........11......
1663	4	0.0162	25.13	........11......
1664	7	0.0418	12.86	..1.....11......
1665	5	0.0107	21.30	........11......
1667	5	0.0003	26.10	........11......
1670	6	0.0140	102.37	........11......
1671	5	0.0253	87.50	........1.......
1673	9	0.0181	20.66	........11......
1676	8	0.0082	24.43	........11......
1677	4	0.0179	26.14	........11......
1678	8	0.0004	26.94	........11......
1679	4	0.0228	86.81	........11......
1680	4	0.0162	34.61	........1.......
1684	6	0.0147	28.84	........11......
1687	4	0.0088	22.19	........11......
1689	4	0.0267	81.31	........11......
1691	4	0.0131	88.26	.........1......
1692	5	0.0002	25.14	........11......
1693	4	0.0226	21.12	........1.......
1694	4	0.0087	25.13	........11......
1696	6	0.0093	16.60	........11......
1697	7	0.0063	22.62	........11......
1698	6	0.0385	17.82	........11......
1701	4	0.0184	25.77	........11......
1703	6	0.0162	25.02	........11......
1704	7	0.0308	19.91	........11......
1705	13	0.0235	17.07	..1.....11.....1
1706	6	0.0172	21.18	..1.....11......
1707	3	0.0049	24.99	........1.......
1708	7	0.0247	16.10	..1.....11......
1709	4	0.0045	90.63	........11......
1710	1	0.0031	79.44	........1.......
1711	4	0.0023	80.52	........11......
1712	3	0.0011	87.02	........11......
1713	4	0.0010	87.66	........11......
1714	3	0.0033	80.53	........11......
1715	5	0.0032	97.70	........11......
1716	2	0.0119	20.25	........1.......
1719	4	0.0031	87.28	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
1720	4	0.0034	78.47	........11......
1722	4	0.0016	96.12	........11......
1723	6	0.0030	25.21	........11......
1724	4	0.0039	92.55	........11......
1725	4	0.0004	103.10	........1.......
1726	4	0.0011	106.57	........11......
1728	4	0.0008	95.89	........11......
1729	4	0.0011	109.52	.........1......
1731	4	0.0029	93.36	.........1......
1732	4	0.0022	94.42	........11......
1733	4	0.0004	17.92	........11......
1734	7	0.0067	27.63	........11......
1736	4	0.0038	82.15	........11......
1739	6	0.0010	105.42	........11......
1740	5	0.0017	91.64	........11......
1741	4	0.0024	93.57	........11......
1742	4	0.0025	96.08	........11......
1743	4	0.0023	96.19	........11......
1744	3	0.0000	20.10	........11......
1747	10	0.0013	7.74	..1.....11......
1748	4	0.0280	16.58	..1.....11......
1749	6	0.0407	22.84	........11......
1751	4	0.0070	26.42	........11......
1755	6	0.0114	20.63	........11......
1756	2	0.0437	26.49	....
1757	2	0.0481	31.80	..1......1......
1758	5	0.0137	23.71	........11......
1762	6	0.0121	25.27	.........1......
1764	7	0.0382	23.24	........11......
1766	8	0.0315	19.68	........11......
1767	7	0.1687	21.38	........11......
1768	4	0.0108	21.20	.........1......
1769	6	0.0091	29.13	..1.....11......
1770	4	0.0300	20.18	........11......
1771	8	0.0098	26.82	..1.....11......
1772	9	0.0195	25.02	........11......
1773	7	0.0252	27.72	........11......
1774	2	0.0375	27.34	........11......
1775	10	0.0071	26.23	........11......
1776	4	0.0071	21.77	........11......
1777	7	0.0287	19.72	........11......
1778	8	0.0084	24.06	........11......
1780	3	0.0011	16.57	........11......
1782	2	0.0237	14.33	........11......
1784	10	0.0249	27.91	........11......
1785	5	0.0113	26.07	........11......
1786	2	0.0168	17.04	........11......
1787	6	0.0175	18.30	..1.....11......
1788	4	0.0077	24.04	........11......
1790	3	0.0308	19.93	........11......
1791	12	0.0129	24.48	........11......
1792	9	0.0045	26.19	........11......
1793	9	0.0176	18.84	........11......
1795	4	0.0135	23.94	........11......
1796	4	0.0954	22.59	........11......
1797	2	0.0269	26.83	........11......
1800	6	0.0421	33.98	..1.....11......
1802	2	0.0549	15.55	........1.......
1807	2	0.0364	23.08	........11......
1808	7	0.0216	22.72	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
1813	4	0.0133	43.23	........11......
1814	2	0.0186	25.63	........11......
1815	12	0.0755	25.39	........11......
1816	7	0.0052	24.29	........11......
1817	4	0.0181	18.00	........11......
1819	9	0.0436	15.28	........11......
1821	6	0.0119	125.28	........11......
1823	9	0.0222	25.85	........11......
1824	11	0.0401	17.45	..1.....11......
1825	6	0.0215	75.44	........11......
1826	4	0.0122	25.10	........11......
1828	6	0.0144	23.16	........11......
1829	5	0.0191	25.30	..1.....11......
1833	6	0.0543	12.14	..11....11......
1834	1	0.0656	21.64	.........1......
1837	6	0.0277	22.63	..1.....11......
1838	2	0.0291	25.82	....
1839	5	0.0116	25.27	........11......
1840	7	0.0293	81.29	........11......
1841	8	0.0123	22.45	........11......
1843	4	0.0259	86.41	........11......
1845	5	0.0140	28.26	..1.....11......
1847	9	0.0061	22.49	..1.....11......
1848	8	0.0098	22.27	........11......
1849	4	0.0134	23.95	........1.......
1850	2	0.0224	29.39	.........1......
1851	8	0.0005	15.82	..11....11.....
1854	6	0.0176	24.02	........11......
1855	6	0.0172	20.52	........11......
1856	2	0.0632	24.51	........1.......
1857	2	0.0279	29.16	..1.....1.......
1860	15	0.0480	13.15	..11....11......
1861	15	0.0287	16.01	..1.....11......
1862	4	0.0071	23.90	.........1......
1863	8	0.0064	21.98	........11......
1866	4	0.0155	16.90	........11......
1869	6	0.0286	20.68	........11......
1870	2	0.0208	30.54	.........1......
1872	7	0.0277	23.79	........11......
1876	2	0.0050	31.34	........11......
1878	5	0.0251	13.29	........1.......
1879	2	0.0145	22.05	..1......1......
1880	6	0.0247	28.00	..1.....11......
1881	4	0.0081	24.53	........11......
1882	7	0.0091	18.34	........11......
1883	6	0.0329	12.16	........11......
1884	4	0.0457	32.63	........11......
1885	2	0.0220	31.81	........11......
1887	2	0.0186	24.48	..1.....11......
1888	5	0.0155	21.32	........11......
1889	2	0.0212	24.03	........11......
1891	6	0.0188	28.34	........11......
1892	4	0.0114	32.77	........11......
1893	2	0.0318	24.68	........11......
1894	4	0.0207	17.84	........11......
1895	2	0.0157	22.16	....
1896	3	0.0089	29.47	........11......
1898	2	0.0004	8.28	........11......
1899	4	0.0009	47.23	.........1......
1900	2	0.0225	23.29	..1.....11......
1901	6	0.0150	28.53	..1.....11......
1903	7	0.0450	13.09	........11......
1905	6	0.0071	32.94	..1.....11......
1906	12	0.0249	27.91	........11......
1907	7	0.0117	12.87	........11......
1908	3	0.0165	22.65	........11......
1910	6	0.0072	25.94	..1.....11......
1911	7	0.0260	17.00	........11......
1912	1	0.0019	12.79	.........1......
1913	4	0.0193	36.56	........11......
1915	6	0.0072	6.52	........11......
1917	6	0.0771	12.59	........11......
1918	9	0.0072	16.37	........11......
1919	4	0.0033	38.15	........11......
1924	2	0.0005	14.69	....
1926	3	0.0033	30.46	........11....1.
1928	7	0.0078	31.47	........11......
1929	5	0.0090	20.72	........11......
1930	8	0.0395	8.81	........11......
1931	4	0.0031	34.41	........11......
1933	7	0.0659	27.17	........11......
1934	6	0.0476	20.17	........11......
1936	2	0.0172	21.18	........11......
1937	8	0.0325	33.69	........11......
1939	1	0.0152	22.49	........1.......
1940	2	0.0212	19.07	..1.....11......
1942	6	0.0130	30.64	........11......
1944	4	0.0002	39.98	........11......
1948	2	0.0038	28.54	........1.......
1950	3	0.0200	12.45	..1.....1.......
1951	4	0.0174	26.52	........11......
1956	4	0.0155	81.40	........11......
1958	7	0.0153	29.64	........1.......
1959	4	0.0231	91.57	........11......
1960	2	0.0097	33.94	........11......
1961	9	0.0226	29.25	..11....11......
1962	6	0.0505	28.32	........11......
1963	5	0.0204	26.46	........11......
1965	8	0.0098	22.29	........11......
1966	8	0.0000	23.72	........11......
1968	2	0.0018	8.34	........1.......
1969	2	0.0293	16.22	....
1972	6	0.0642	10.96	........11......
1974	5	0.0169	26.87	........11......
1976	17	0.0264	34.13	........11......
1978	4	0.0066	34.15	.........1......
1980	6	0.0186	25.65	........11......
1981	2	0.0146	34.77	........11......
1982	5	0.0106	26.93	........11......
1983	4	0.0336	38.06	........11......
1984	7	0.0115	32.56	........11......
1985	4	0.0149	82.47	.........1......
1986	3	0.0036	23.07	.........1......
1987	5	0.0337	23.99	........11......
1988	5	0.0104	24.89	........11......
1990	2	0.0221	23.51	........11......
1994	8	0.0015	37.64	........11......
1997	5	0.0098	25.63	........11......
1998	5	0.0304	25.24	........11......
1999	4	0.0119	25.45	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
2006	2	0.0282	25.05	........1.......
2007	2	0.0186	20.37	........11......
2008	1	0.0079	24.88	....
2009	6	0.0923	22.97	..1.....11......
2013	2	0.0732	25.79	........11......
2015	5	0.0117	25.80	........11......
2018	5	0.0143	23.25	.........1......
2019	9	0.0097	30.96	..11....11......
2020	7	0.0085	30.07	........11......
2021	7	0.0047	40.33	..1.....11......
2022	9	0.0223	14.76	..1.....11......
2023	4	0.0208	26.56	........11......
2024	10	0.0123	31.48	........11......
2026	6	0.0073	28.26	..1.....11......
2027	4	0.0255	28.88	........11....1.
2030	14	0.0438	26.46	..1.....11......
2032	5	0.0239	27.16	........11....1.
2036	6	0.0099	35.11	........11......
2037	3	0.0231	23.01	..1.....11......
2038	6	0.0315	24.34	........11......
2039	8	0.0397	13.94	........11......
2040	5	0.0235	22.81	........11......
2042	7	0.0177	20.87	........11......
2047	6	0.0385	24.59	........11......
2048	6	0.0118	25.58	........11......
2049	5	0.0075	17.62	..1.....11......
2050	8	0.0071	26.19	........11......
2054	2	0.0206	15.36	........1.......
2055	5	0.0173	21.11	........11......
2056	2	0.0409	21.75	..1.....11......
2057	9	0.0888	11.73	........11......
2058	6	0.0133	24.06	........11......
2060	7	0.0419	24.68	........11......
2064	6	0.0170	30.79	..1......1......
2065	8	0.0286	31.85	........11......
2066	7	0.0223	30.13	........11......
2067	2	0.0383	32.52	........1.......
2069	8	0.0480	16.41	........11......
2071	8	0.0287	25.97	.........1......
2073	2	0.0579	29.00	..1......1......
2074	5	0.0305	20.02	........11......
2076	9	0.0127	14.19	........11......
2077	6	0.0121	15.23	........11......
2078	4	0.0138	21.60	........11......
2080	7	0.0185	14.11	........11......
2081	2	0.0237	36.00	........1.......
2082	4	0.0134	43.66	........11......
2083	7	0.0236	18.08	..1.....11......
2084	6	0.0094	36.07	........11......
2085	2	0.0424	26.92	........11....1.
2086	4	0.0101	34.40	........11......
2090	6	0.0265	27.03	........11......
2092	7	0.0326	26.14	........11......
2093	8	0.0214	23.92	..1.....1.......
2095	6	0.0083	19.28	........11......
2096	6	0.0001	50.40	........11......
2100	6	0.0022	18.62	........11......
2101	6	0.0216	29.92	........11......
2102	2	0.0371	11.46	..1.............
2103	2	0.0296	16.14	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111 1234567890123456
2104	9	0.0278	13.22	........11......
2106	6	0.0273	26.64	........11......
2107	2	0.0099	17.61	........11......
2108	4	0.0086	9.02	........11......
2109	3	0.0376	28.57	........11......
2110	19	0.0047	3.69	........11......
2115	10	0.0358	14.67	..1.....11......
2116	5	0.0005	23.44	........11......
2117	5	0.0291	39.03	........11......
2118	2	0.0255	26.32	........11......
2119	7	0.0121	26.46	..1.....11......
2122	4	0.0001	18.27	........11......
2123	4	0.0379	28.45	.........1......
2124	2	0.0522	26.59	........1.......
2125	5	0.0284	39.56	........11......
2126	4	0.0595	10.87	........11......
2127	3	0.0330	24.23	....
2129	4	0.0107	24.50	..1.....11......
2131	4	0.0103	34.43	........11......
2132	2	0.0245	12.84	........1.......
2133	4	0.0085	34.68	........11......
2135	11	0.0132	19.17	........11......
2137	2	0.0202	15.53	........11......
2138	2	0.0599	14.29	.........1......
2139	6	0.0234	20.83	........11......
2140	7	0.0395	13.97	........11......
2141	2	0.0123	19.92	........11......
2142	8	0.0082	46.38	..1.....11......
2146	8	0.0341	11.94	........11......
2147	2	0.0193	28.93	........11......
2148	9	0.0110	16.94	........11......
2149	3	0.0178	18.15	.........1......
2150	2	0.0175	19.15	..1......1......
2153	5	0.0269	14.08	........11......
2154	6	0.0085	47.71	........11......
2155	7	0.0164	37.64	........11......
2156	10	0.0111	16.61	........11......
2157	7	0.0393	13.56	........11......
2159	3	0.0004	27.43	........11......
2160	2	0.0100	22.01	........11......
2163	10	0.0038	8.98	........11......
2164	4	0.0259	26.12	.........1......
2165	9	0.0002	19.02	........11......
2166	5	0.0345	14.95	.........1......
2167	6	0.0647	14.40	........11......
2168	4	0.0052	36.88	.........1......
2169	13	0.0141	42.50	........11......
2170	5	0.0149	14.33	.........1......
2171	8	0.0313	27.28	........11......
2172	4	0.0250	33.46	........11......
2173	4	0.0597	21.66	........11......
2174	2	0.0045	39.49	........11......
2176	5	0.0204	27.37	........11......
2178	5	0.0095	27.27	........11......
2180	2	0.0460	15.56	..1......1......
2181	4	0.0044	25.23	........11......
2182	4	0.0200	17.12	........11......
2183	6	0.0161	36.28	........11......
2184	2	0.0545	9.89	........11......
2186	2	0.0008	48.06	........11......

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ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
2188	3	0.0265	14.20	..1.....11......
2189	7	0.0457	12.41	..1.....11......
2190	5	0.0156	35.27	........11......
2191	8	0.0386	16.98	........11......
2193	6	0.0326	29.30	........11......
2194	3	0.0094	17.23	.........1......
2195	6	0.0001	16.53	........11......
2196	9	0.0381	13.59	..11....11.....
2197	2	0.0417	14.92	........1.......
2200	3	0.0161	26.35	........11......
2202	4	0.0000	15.33	........11......
2204	3	0.0005	19.59	........11....1.
2206	7	0.0262	32.71	........11......
2207	3	0.0209	16.72	........11......
2208	7	0.0163	14.35	........11......
2209	4	0.0066	32.62	........11......
2210	4	0.0081	32.22	........1......1
2211	7	0.0181	43.08	........11......
2212	4	0.0044	39.96	.........1......
2215	5	0.0003	82.52	........11......
2217	2	0.0009	28.03	.........1......
2218	9	0.0058	41.79	........11......
2219	4	0.0154	35.45	........11......
2221	6	0.0256	10.00	..1.....11......
2222	11	0.0148	15.79	..1.....11......
2225	2	0.0072	17.15	.........1......
2226	13	0.0163	12.30	..1.....11......
2227	6	0.0134	19.02	........11......
2228	7	0.0142	17.67	........11......
2229	2	0.0084	38.05	........11......
2230	8	0.0175	15.21	..1.....11......
2231	6	0.0072	33.11	........11......
2232	2	0.0039	11.16	..1.....11......
2233	2	0.0040	27.65	....
2234	2	0.0092	23.03	.........1......
2236	6	0.0083	30.49	........11......
2237	4	0.0086	27.09	........11......
2238	7	0.0019	22.33	........11......
2239	4	0.0100	33.38	........11......
2240	4	0.0116	31.04	..1.....11......
2241	3	0.0074	25.59	.........1......
2242	3	0.0023	29.07	..1.....1.......
2244	5	0.0013	24.79	........1.......
2245	2	0.0047	19.30	........11......
2247	5	0.0012	25.48	........11......
2248	2	0.0011	16.86	..1.....11......
2249	2	0.0020	33.91	.........1......
2250	2	0.0007	33.50	....
2252	2	0.0063	40.15	........11......
2253	2	0.0042	18.22	........11......
2255	2	0.0063	17.35	........1.......
2256	4	0.0052	24.25	........11......
2257	4	0.0077	22.88	........11......
2258	2	0.0139	37.30	........11......
2259	4	0.0019	25.24	........11......
2260	8	0.0305	13.85	........11......
2261	2	0.0286	23.08	........11......
2262	7	0.0647	13.62	........11......
2263	6	0.0169	33.89	........11......
2265	6	0.0097	35.50	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
2266	6	0.0040	20.05	........11......
2269	4	0.0052	24.27	........11......
2270	3	0.0192	12.31	..1......1......
2272	9	0.0230	14.21	........11......
2273	3	0.0069	20.11	........11......
2274	4	0.0005	32.32	........11......
2275	6	0.0024	17.78	..1.....11......
2276	9	0.0010	20.08	........11......
2278	2	0.0013	23.44	........11......
2280	2	0.0088	24.08	........11......
2281	6	0.0219	29.71	........11......
2284	2	0.0034	22.89	........11......
2285	4	0.0067	17.06	........11......
2286	5	0.0042	34.01	..1.....11......
2288	4	0.0189	35.11	........11......
2289	7	0.0062	26.45	..1.....11......
2290	2	0.0082	30.76	..1.....11......
2291	3	0.0187	22.28	........11......
2292	6	0.0214	27.45	........1.......
2293	6	0.0143	20.22	........11......
2294	6	0.0171	16.86	........11......
2295	4	0.0046	32.43	........11......
2297	5	0.0315	24.82	........11......
2298	6	0.0167	22.54	........11......
2299	7	0.0049	19.98	........11......
2300	4	0.0058	31.37	........11......
2301	14	0.0120	20.18	..1.....11......
2302	2	0.0037	27.36	........11......
2303	2	0.0073	16.34	........1.......
2304	2	0.0092	18.31	........11......
2305	6	0.0068	33.59	........11......
2306	5	0.0073	24.23	........11......
2308	5	0.0062	28.05	........11......
2312	7	0.0047	13.18	........11......
2314	5	0.0140	14.80	........11......
2315	2	0.0071	31.46	........1.......
2316	5	0.0040	15.16	........11......
2317	1	0.0044	20.14	.........1......
2319	2	0.0143	18.44	..1.....11......
2321	6	0.0196	9.94	........11......
2322	3	0.0059	15.10	..1.....11......
2323	2	0.0046	23.50	.........1......
2324	6	0.0027	24.44	........11......
2325	2	0.0042	17.16	..1......1......
2327	4	0.0017	19.24	........11......
2329	5	0.0036	14.62	........11......
2330	2	0.0091	18.33	.........1......
2333	4	0.0209	76.55	........11......
2334	9	0.0020	15.74	........11......
2335	7	0.0017	15.93	........11......
2336	6	0.0395	17.59	........11......
2337	6	0.0064	27.60	..1.....11......
2338	10	0.0123	17.51	........11......
2339	6	0.0255	31.19	........11......
2340	5	0.0240	17.92	........11......
2341	4	0.0151	32.72	........11......
2343	2	0.0096	17.05	..1.....1.......
2344	6	0.0084	30.22	........11......
2345	2	0.0077	25.20	........11......
2347	6	0.0173	13.32	........11......

IMPS Missed-Predictions Catalog

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2348	2	0.0162	20.84	..1.....11......
2349	2	0.0029	23.51	..1.....11......
2350	7	0.0056	18.61	........11......
2351	2	0.0041	15.12	.........1......
2352	4	0.0014	22.64	........11......
2353	4	0.0054	18.88	........1.......
2354	2	0.0020	24.90	..1......1......
2355	4	0.0037	21.77	..1.....11......
2356	6	0.0028	16.72	........1.......
2358	3	0.0048	36.58	........11......
2359	2	0.0157	13.99	....
2361	4	0.0036	25.41	........11......
2362	4	0.0036	33.56	........11......
2363	2	0.0046	33.83	........11......
2364	2	0.0161	15.86	........11......
2367	7	0.0032	31.20	..1.....11......
2368	6	0.0075	21.93	........11......
2370	2	0.0012	31.35	....
2372	2	0.0022	35.79	........1.......
2373	8	0.0062	22.24	........11......
2374	6	0.0060	22.66	..1......1......
2375	4	0.0013	23.95	.........1......
2377	4	0.0023	25.54	.........1......
2378	2	0.0021	30.24	....
2379	5	0.0223	21.38	..1.....11......
2380	8	0.0131	12.14	........11......
2381	10	0.0069	83.91	........11......
2382	6	0.0345	23.36	........11......
2383	2	0.0218	12.78	........11......
2385	4	0.0170	26.78	..1.....11......
2387	10	0.0063	22.07	........11......
2388	4	0.0184	20.46	........11......
2389	4	0.0209	38.36	........11......
2390	7	0.0128	19.11	........11......
2391	7	0.0231	91.56	.........1......
2397	4	0.0009	30.00	........11......
2398	6	0.0017	21.19	........11......
2400	3	0.0061	19.68	........11......
2402	4	0.0044	34.78	........11......
2405	2	0.0070	18.19	..1.....1.......
2406	4	0.0048	30.30	........11......
2407	8	0.0016	28.61	........11......
2408	4	0.0063	25.30	..1.....11......
2409	2	0.0054	30.08	........11......
2410	2	0.0066	13.65	........11......
2411	6	0.0186	24.60	........11......
2413	2	0.0177	18.01	........1.......
2414	4	0.0005	27.70	........11......
2418	6	0.0111	25.90	..11....11......
2419	8	0.0075	12.21	........11......
2422	6	0.0065	29.90	........11......
2423	6	0.0226	73.61	........11......
2424	3	0.0071	41.57	........11......
2425	2	0.0013	36.64	........1.......
2426	6	0.0104	32.86	........11......
2427	3	0.0039	28.14	........11......
2428	6	0.0043	21.23	........11......
2429	8	0.0061	22.52	........11......
2431	4	0.0092	28.92	........11......
2432	2	0.0378	35.87	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
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				1234567890123456
2433	1	0.0022	28.45	....
2434	6	0.0030	80.44	........11......
2435	3	0.0621	33.64	........1.......
2437	4	0.0150	22.70	........11......
2438	7	0.0058	45.82	........11......
2439	2	0.0259	21.72	........1.......
2440	4	0.0115	19.63	..1.....11......
2442	2	0.0073	20.57	....
2443	3	0.0059	28.81	..1.....11......
2444	6	0.0266	27.00	........11......
2446	9	0.0245	22.33	........11......
2447	3	0.0025	24.43	.........1......
2448	3	0.0046	32.58	........11......
2449	4	0.0026	27.56	........11....1.
2450	5	0.0042	21.56	........11......
2451	6	0.0238	17.99	........11......
2452	9	0.0304	24.13	........11......
2453	9	0.0092	22.95	........11......
2454	2	0.0148	30.95	........11......
2458	7	0.0063	27.71	........11......
2460	8	0.0124	37.29	........11......
2463	3	0.0026	27.51	.........1......
2464	8	0.0027	40.25	........11......
2466	5	0.0160	17.46	.........1......
2467	6	0.0018	41.43	........11......
2469	2	0.0133	31.46	....
2473	12	0.0101	15.17	........11......
2474	7	0.0082	22.25	..11....11.....
2475	3	0.0017	16.91	........11......
2476	6	0.0089	19.46	........11......
2477	2	0.0112	25.10	..1.....1.......
2480	9	0.0082	40.32	..1.....11......
2481	5	0.0095	23.12	........11......
2482	4	0.0066	27.23	........11......
2483	3	0.0125	27.20	........11......
2484	6	0.0124	21.76	........1.......
2487	5	0.0160	23.87	........11......
2488	8	0.0061	17.81	........11......
2489	6	0.0150	34.27	........11......
2490	7	0.0044	20.88	........11......
2491	4	0.0193	20.01	........11......
2492	2	0.0041	27.31	........11......
2493	2	0.0196	19.83	....
2494	6	0.0021	30.33	........11......
2495	2	0.0088	17.06	.........1......
2497	8	0.0258	17.29	........11......
2500	9	0.0042	21.47	........11......
2501	5	0.0076	15.97	........11......
2502	8	0.0154	35.43	........11......
2503	2	0.0011	25.97	........11......
2504	6	0.0164	43.21	..1.....11......
2505	3	0.0418	20.56	........11......
2506	5	0.0093	28.81	..1.....11......
2508	2	0.0128	19.52	..1.....1.......
2512	4	0.0017	26.77	........11......
2513	4	0.0282	38.39	..1.....11......
2514	9	0.0248	19.14	........11......
2515	14	0.0849	13.22	........11......
2516	2	0.0045	20.80	....
2517	4	0.0024	22.59	........11......

IMPS Missed-Predictions Catalog

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
2518	6	0.0069	26.63	........1.......
2519	7	0.0085	25.03	..11....11......
2520	2	0.0083	30.49	..............1.
2522	2	0.0037	12.75	........11......
2523	7	0.0039	18.63	........11......
2525	2	0.0022	23.41	........11......
2526	3	0.0281	20.85	..1.....1.......
2529	2	0.0132	22.05	........1.......
2530	4	0.0028	21.07	........11......
2532	6	0.0299	14.98	........11......
2533	9	0.0018	25.95	........11......
2534	4	0.0074	25.63	........11......
2535	5	0.0535	24.62	........11......
2536	7	0.0032	27.50	........11......
2538	6	0.0032	97.25	........11......
2539	12	0.0214	9.52	........11......
2540	4	0.0031	20.00	....
2542	3	0.0137	20.49	........11......
2543	5	0.0025	27.64	........11......
2544	8	0.0252	24.83	........11......
2545	10	0.0204	15.43	..11....11.....
2547	8	0.0443	26.34	........11......
2548	4	0.0083	83.94	.........1......
2549	5	0.0033	30.68	........11......
2551	6	0.0134	15.15	..1.....11......
2552	7	0.0093	22.84	.........1......
2554	2	0.0104	34.27	........1.......
2556	4	0.0070	20.94	..1.....11......
2557	2	0.0121	31.81	..1.....11......
2558	3	0.0075	15.87	..1.....11......
2560	6	0.0102	27.50	........11......
2561	2	0.0149	22.77	........11......
2562	2	0.0056	29.59	........11......
2563	2	0.0271	26.73	........1.......
2565	2	0.0247	28.03	........11......
2566	5	0.0238	22.68	..1.....11......
2567	5	0.0068	26.85	........11......
2568	9	0.0204	12.28	..1.....11......
2569	6	0.0090	29.20	........11......
2572	7	0.0172	17.22	........11......
2573	4	0.0211	20.51	........11......
2574	6	0.0286	20.66	........11......
2575	2	0.0249	17.60	........1.......
2576	2	0.0150	28.53	..1.....11......
2577	9	0.0049	19.95	........11......
2578	5	0.0246	22.31	........11......
2580	2	0.0098	35.23	........1.......
2582	6	0.0060	17.98	........11......
2586	4	0.0070	89.01	........11......
2588	6	0.0121	24.43	..1.....11......
2589	10	0.0033	19.11	........11......
2591	11	0.0076	19.17	........11......
2592	6	0.0046	23.12	........11......
2593	2	0.0033	23.16	........11......
2594	7	0.0015	26.11	........11......
2595	5	0.0081	15.47	........11......
2596	7	0.0249	14.63	........11......
2597	9	0.0015	17.02	........11......
2598	8	0.0182	17.95	........11......
2599	8	0.0133	15.17	........11......

ID/2	NM	AlbGLB	DiamLUB	MPStatW
				1111111
				1234567890123456
2600	5	0.0044	79.07	........11......
2601	7	0.0296	16.15	........11......
2602	8	0.0135	15.05	........11......
2605	9	0.0107	16.96	........11......
2606	4	0.0020	14.75	..11............
2607	8	0.0226	22.02	........11......
2608	7	0.0024	24.61	........11......
2610	3	0.0107	26.91	.........1......
2611	7	0.0080	21.47	........11......
2613	7	0.0128	18.80	........11......
2614	4	0.0053	83.19	........11......
2615	2	0.0068	21.32	..1.....11......
2616	4	0.0024	28.62	........11......
2617	4	0.0171	105.13	........11......
2618	4	0.0018	96.60	........11......
2621	4	0.0018	96.31	........11......
2622	7	0.0128	19.47	..1.....11......
2623	4	0.0268	83.44	........11......
2625	1	0.0159	33.33	........1.......
2626	4	0.0034	28.51	........11......
2627	7	0.0113	26.07	..1.....11......
2628	4	0.0057	30.63	..1.....11......
2629	6	0.0173	38.46	........11......
2631	4	0.0116	102.80	........11......
2632	2	0.0072	39.31	.........1......

Part III: Appendices

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Appendix 1

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This appendix acknowledges the many people who contributed to the successful completion of this work.

First and foremost we wish to acknowledge the financial support provided by Steve Price, Phillips Laboratory, Geophysical Directorate, without which this work would not have been undertaken. Similarly we owe a debt of gratitude to the late Dr. Barry Katz, the SDIO program director for phenomenology who began many of the programs that funded research in this area. In particular, it was he who was responsible for the Space Infrared Imaging Telescope II (SPIRIT II), the Midcourse Space Experiment (MSX), and the Strategic Scene Generation Model as well as the old "Project 2" that included Celestial Backgrounds. Barry understood the value of directed basic research and allowed Branch Chiefs, such as Steve Price, the freedom to support such efforts as IMPS.

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Appendix 2

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Appendix 3

ACRONYMS AND GLOSSARY

This appendix defines the acronyms and IMPS-specific terms used in the IRAS Project. See ES (1) for more information on terms not explicated here.

Acronym or term	Meaning
A	See *Bond Albedo*
AACV	Area Coverage File
AAG	Asteroid Advisory Group This was the team of scientists, chaired by D. Matson, responsible for the scientific content of the IRAS, *i.e.*, ADAS, asteroid program. (*i.e.*, H. Aumann, M. Hanner, L. Lebofsky, E. Tedesco, G Veeder, and R. Walker)
ACFU	Area Coverage Updates File (SDAS)
ACOV	Area Coverage
AD	Asteroid Derived Information Computation Subsystem
ADAS	Asteriod Data Analysis Subsystem The set of algorithms and programs used to extract and reduce the IRAS asteroid data. The results of this processing was published in the *IRAS Asteroid and Comet Catalog* (1986).
ADPC	ADAS Download PC (An IBM-XT Personal Computer)
ADS	Astrophysics Data System
ADStat	Asteroid-Derived Status code word
AIF	AAG Input File
AK	Asteroid Known Object Association Subsystem
Albedo	See *Bond Albedo* and p_H
AlbGLB	Albedo Greatest Lower Bound
AM	Asteroid Multiple Sighting Association Subsystem
AO	Additional Observation (a.k.a. Pointed Observation)
AOFH	Asteroid Parameters File from Hours Confirmation (SDAS)
AOFM	Asteroid Parameters File from Months Confirmation (SDAS)
APAS	Asteroid Processing and Analysis System
AR	Asteroid Single Sighting Recognition Subsystem (alias)

Acronym or term	Meaning
AS	Asteroid Single Sighting Recognition Subsystem
AStatW	Asteroid Status Word (rejection and warning flags)
ASTCOM	Asteroid and Comet orbital elements file
AstCSt	Asteroid Confusion Status code word
AstFSt	Asteroid Flux Status code word
ATA	Asteroid Tagging Algorithm (SDAS) This was software in the Source Confirmation Subsystem of SDAS which wrote each source of asteroid-like color into one or both of two files (CN28 and CN29) for use as input to ADAS. All 25 μm-only seconds-confirmed sources were also written to CN28.
AU	Astronomical Unit
AWF	Asteroid Working File
b	Galactic latitude
Bond Albedo	The fraction of the total incident light reflected by a spherical body. It is equal to the phase integral multiplied by the ratio of its brightness at zero solar phase angle to the brightness of a perfectly diffusing disk with the same diameter viewed at zero solar phase angle and perpendicular to its surface.
BPHF	Boresight Pointing History File
CDJ	Critical Daily Job
CGQ	Catalogued Galaxies and Quasars observed in the IRAS Survey, JPL D-1932, 1985
CGU	Convolved Gaussian-Uniform (positional) Uncertainty
CN	Source Confirmation Subsystem (SDAS)
CN28,CN29	SDAS Asteroid and Comet Data Output Files These are the files of sightings determined by the ATA to be of asteroid-like color. CN28 & CN29 were written by the portions of the ATA residing in the hours & months confirmation processing. Note that all sightings in CN29 also appear in CN28 and that all 25 μm-only seconds-confirmed sources were also written to CN28.
CRDD	Calibrated Reconstructed Detector Data File (SDAS)
CUSPOOL	A data base of Small Extended Sources (SESs) created by the SDAS Cluster-Analysis Processor.
DAX	Dutch Additional Experiment
DB	Database Interface & Management Subsystem
DiamLUB	Diameter Least Upper Bound
DN	Status & Data Download Subsystem
DOBS	Data Directory Observation File (SADS)

Acronym or term		Meaning
DP		Display Subsystem (old: now is User Interface)
DS		Deep Sky Data Extraction Subsystem (deleted)
ES	(1)	*Infrared Astronomical Satellite (IRAS) Catalogs and Atlases Volume 1 Explanatory Supplement* (1988, C.A. Beichman, G. Neugebauer, H.J. Habing, P.E. Clegg, and T.J. Chester, eds.), hereinafter referred to simply as the *ES*. It is available as NASA publication No. RP-1190.
	(2)	Small Extended Source Data Extraction Subsystem
FP		Final Product Preparation Subsystem
FPS		Focal Plane Shutter
FOR		Fraction Observed Ratio
FSS		Faint Source Survey
G		The "slope parameter" (analogous to the phase coefficient) of the 1991 IAU asteroid magnitude system (*cf.*, H).
GROC		Netherlands Committee for Geophysics and Space Research
GSFC		Goddard Space Flight Center
H		Asteroid absolute magnitude on the 1991 IAU system. In theory, knowledge of H and G, together with the known geometry of the observation, permit the computation of the asteroid's visual (V-band) magnitude. In practice, poorly-determined values of H and/or G, and variations due to light curves and aspect variation, limit the accuracy of most V-band brightness estimates to about 0.5 mag.
HCON		Hours Confirmed
IAU		International Astronomical Union
ICIRAS		Industrial Consortium for IRAS
IGO		IRAS Ground Operations
IMPS		IRAS Minor Planet Survey
IN		Input Subsystem (SDAS)
IN		IRAS Sighting and Auxiliary Input Data Collection Subsystem
IPAPP		IRAS Project Asteroid Program Plan
IPL		Image Processing Laboratory
IRAS		Infrared Astronomical Satellite
JIPEG		Joint IRAS Project Executive Group
JISWG		Joint Infrared Science Working Group
JPL		Jet Propulsion Laboratory
JPRD		Joint Project Requirements Document
KADB		Known Asteroid Data Base

Acronym or term	Meaning
KAPS	Known Asteroid Processing Subsystem (SDAS)
l	Galactic longitude
LBH	Lumme-Bowell-Harris phase function
LRS	Low Resolution Spectrometer
MCON	Months Confirmed
MDD	Mission Design Document
MPStatW	Missed-Prediction Status Word
NIVR	Netherlands Agency for Aerospace Programs
NM	Number of Missed Predictions
NSCF	Non-Seconds Confirmed due to a Failed detector (SDAS) The design of the focal plane of the IRAS telescope provided that each source would pass across two detectors in each band. When this happened, the source is said to be "seconds confirmed". In cases where a detection could not have seconds confirmed because it was aligned with a failed detector, the sighting was declared NSCF
NSSDC	National Space Science Data Center located at the Goddard Space Flight Center
OBS	Observation
OCC	Operations Control Center
p_H	The visual (V band of Johnson UBV system) geometric albedo on the 1991 IAU asteroid magnitude system. The ratio of the flux received from a (presumed spherical) object to that which would be received from a Lambertian disk of the same size located at the same distance and at zero degrees solar phase angle.
PAF	Preliminary Analysis Facility
PDS	Planetary Data System
PLC	Probability of Light Curve
PMR	Program Master Schedule
POP	Project Operating Plan
PR	Pointing Reconstruction Subsystem (SDAS)
Predicted sighting conflict	Two or more asteroids associated with the same IRAS source
PS	Point Source Data Extraction Subsystem (the ATA in SDAS)
PSC	Point Source Catalog
PSCORE	SDAS Position Scoring processor
RA	Resident Astronomer
RAL	Rutherford and Appleton Laboratories (Site of PAF)

Acronym or term	Meaning
ROG	Space Research Department of the University of Groningen
SCON	Seconds Confirmed
SCONS	Source Confirmation Subsystem (SDAS)
SCP	Software Change Proposal
SDAS	Scientific Data Analysis Subsystem (The data processing system which produced the IRAS Point Source Catalog)
SES	Small Extended Source (SDAS)
SESPOOL	A data base used in SES processing (SDAS)
SHEF	Satellite Heliocentric Ephemeris File (SDAS)
Sighting	A sequence of detections attributable to a single source in the sky and which satisfy the requirements of seconds confirmation (*ES*, page V-36).
Singleton	An asteroid with only one accepted sighting in a single band (usually 25 μm).
SNR	As used herein: the instantaneous SNR which SDAS computed from a model of the sky background to one decimal place (*ES*, V.C.2, page V-10)
SOP	Satellite Operations Plan. There were two SOPs per day and 600 SOPs in the entire mission. (*ES*, III.C.1, page III-9)
SOTS	Science Operations Team, SDAS
SP	Special Processes Subsystem
SPA	Survey Performance Analysis
SRC	Science Research Council, U.K.
SSC	Serendipitous Survey Catalog
SSS	IRAS Small Scale Structure Catalog, JPL D-2988, 1985
SWC	Short Wavelength Channel
SY	System Execution & Control Subsystem
TSO	Time Sharing Option (IBM)
UI	User Interface Subsystem
UIDB	Universal Input DataBase
UO	Number of Observations Used
US	Number of Sightings Used
UTC	Universal Time, Coordinated
WSDB	Working Survey Data Base
ZZ	Database Interface & Management Subsystem (alias)

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Appendix 4

IRAS FLUX LOOK-UP TABLE

This appendix presents the flux look-up table used to obtain an albedo given a heliocentric distance and bond albedo.

Albedos and diameters were computed for each known object by applying the same algorithm to each detection in any survey band. The computation of albedo for each detection employed a table of normalized fluxes as a function of Bond albedo and heliocentric distance; this table was provided by L. Lebofsky and was derived from the IRAS standard thermal model (*cf.*, Lebofsky *et al.*, 1986a,b). See §4.3.4.C, page 37 for additional details regarding the computation of the albedo for a given detection of a given asteroid.

In general, the flux was interpolated in the IRAS flux look-up table for a given albedo and heliocentric distance. The interpolation was linear in albedo and quadratic in heliocentric distance; the flux was then scaled for the current estimate of the radius and the distance from the spacecraft to the asteroid, and the phase-angle correction was applied as discussed in §4.3.4.C.

The four fluxes in the look-up table are for the four IRAS bandpasses and are given in units of W m^{-2} for a hypothetical asteroid with a diameter of 1 km located 1 AU from the spacecraft. All calculations were performed using units of W m^{-2} and were only converted to units of flux density (*i.e.*, Janskys) when writing the final data products.

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
0.60	0.000	0.433E-13	0.945E-14	0.122E-14	0.161E-15
0.60	0.050	0.417E-13	0.923E-14	0.120E-14	0.158E-15
0.60	0.100	0.401E-13	0.901E-14	0.117E-14	0.156E-15
0.60	0.150	0.384E-13	0.878E-14	0.115E-14	0.153E-15
0.60	0.200	0.367E-13	0.853E-14	0.113E-14	0.151E-15
0.60	0.250	0.350E-13	0.828E-14	0.110E-14	0.148E-15
0.60	0.300	0.331E-13	0.802E-14	0.108E-14	0.145E-15
0.60	0.350	0.313E-13	0.774E-14	0.105E-14	0.142E-15
0.60	0.400	0.294E-13	0.745E-14	0.102E-14	0.138E-15
0.60	0.450	0.274E-13	0.714E-14	0.995E-15	0.135E-15
0.60	0.500	0.253E-13	0.682E-14	0.963E-15	0.131E-15
0.60	0.550	0.232E-13	0.647E-14	0.929E-15	0.127E-15
0.60	0.600	0.210E-13	0.609E-14	0.891E-15	0.123E-15
0.60	0.620	0.200E-13	0.594E-14	0.875E-15	0.121E-15
0.60	0.640	0.191E-13	0.577E-14	0.859E-15	0.119E-15
0.60	0.660	0.182E-13	0.560E-14	0.842E-15	0.117E-15
0.60	0.680	0.172E-13	0.543E-14	0.824E-15	0.115E-15
0.60	0.700	0.162E-13	0.525E-14	0.805E-15	0.112E-15
0.80	0.000	0.279E-13	0.722E-14	0.100E-14	0.136E-15
0.80	0.050	0.267E-13	0.704E-14	0.985E-15	0.134E-15
0.80	0.100	0.256E-13	0.686E-14	0.967E-15	0.132E-15
0.80	0.150	0.244E-13	0.667E-14	0.948E-15	0.129E-15
0.80	0.200	0.232E-13	0.647E-14	0.929E-15	0.127E-15
0.80	0.250	0.219E-13	0.626E-14	0.908E-15	0.125E-15
0.80	0.300	0.207E-13	0.604E-14	0.886E-15	0.122E-15
0.80	0.350	0.194E-13	0.582E-14	0.863E-15	0.119E-15
0.80	0.400	0.181E-13	0.558E-14	0.839E-15	0.117E-15
0.80	0.450	0.167E-13	0.533E-14	0.814E-15	0.113E-15
0.80	0.500	0.153E-13	0.507E-14	0.786E-15	0.110E-15
0.80	0.550	0.139E-13	0.479E-14	0.757E-15	0.107E-15
0.80	0.600	0.124E-13	0.449E-14	0.725E-15	0.103E-15
0.80	0.620	0.118E-13	0.436E-14	0.712E-15	0.101E-15
0.80	0.640	0.112E-13	0.423E-14	0.698E-15	0.996E 16
0.80	0.660	0.106E-13	0.409E-14	0.683E-15	0.978E-16
0.80	0.680	0.995E-14	0.395E-14	0.668E-15	0.960E-16
0.80	0.700	0.932E-14	0.381E-14	0.652E-15	0.941E-16
1.00	0.000	0.191E-13	0.577E-14	0.859E-15	0.119E-15
1.00	0.050	0.183E-13	0.562E-14	0.843E-15	0.117E-15
1.00	0.100	0.174E-13	0.546E-14	0.827E-15	0.115E-15
1.00	0.150	0.165E-13	0.530E-14	0.811E-15	0.113E-15
1.00	0.200	0.156E-13	0.513E-14	0.793E-15	0.111E-15
1.00	0.250	0.147E-13	0.496E-14	0.775E-15	0.109E-15
1.00	0.300	0.138E-13	0.477E-14	0.756E-15	0.107E-15
1.00	0.350	0.129E-13	0.458E-14	0.736E-15	0.104E-15
1.00	0.400	0.119E-13	0.438E-14	0.714E-15	0.102E-15
1.00	0.450	0.109E-13	0.417E-14	0.692E-15	0.989E-16
1.00	0.500	0.995E-14	0.395E-14	0.668E-15	0.960E-16
1.00	0.550	0.894E-14	0.372E-14	0.642E-15	0.929E-16
1.00	0.600	0.790E-14	0.347E-14	0.614E-15	0.895E-16
1.00	0.620	0.749E-14	0.336E-14	0.602E-15	0.880E-16
1.00	0.640	0.707E-14	0.325E-14	0.589E-15	0.865E-16
1.00	0.660	0.664E-14	0.314E-14	0.576E-15	0.850E-16
1.00	0.680	0.622E-14	0.303E-14	0.563E-15	0.833E-16
1.00	0.700	0.579E-14	0.291E-14	0.549E-15	0.816E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
1.20	0.000	0.137E-13	0.475E-14	0.754E-15	0.106E-15
1.20	0.050	0.131E-13	0.462E-14	0.740E-15	0.105E-15
1.20	0.100	0.124E-13	0.449E-14	0.725E-15	0.103E-15
1.20	0.150	0.117E-13	0.434E-14	0.710E-15	0.101E-15
1.20	0.200	0.111E-13	0.420E-14	0.694E-15	0.992E-16
1.20	0.250	0.104E-13	0.405E-14	0.678E-15	0.972E-16
1.20	0.300	0.967E-14	0.389E-14	0.661E-15	0.951E-16
1.20	0.350	0.896E-14	0.372E-14	0.642E-15	0.930E-16
1.20	0.400	0.825E-14	0.355E-14	0.623E-15	0.906E-16
1.20	0.450	0.753E-14	0.337E-14	0.603E-15	0.882E-16
1.20	0.500	0.680E-14	0.318E-14	0.581E-15	0.855E-16
1.20	0.550	0.606E-14	0.298E-14	0.558E-15	0.827E-16
1.20	0.600	0.531E-14	0.277E-14	0.532E-15	0.796E-16
1.20	0.620	0.501E-14	0.268E-14	0.522E-15	0.783E-16
1.20	0.640	0.470E-14	0.259E-14	0.511E-15	0.769E-16
1.20	0.660	0.440E-14	0.249E-14	0.499E-15	0.755E-16
1.20	0.680	0.410E-14	0.240E-14	0.487E-15	0.740E-16
1.20	0.700	0.380E-14	0.229E-14	0.474E-15	0.725E-16
1.40	0.000	0.102E-13	0.400E-14	0.673E-15	0.966E-16
1.40	0.050	0.964E-14	0.388E-14	0.660E-15	0.951E-16
1.40	0.100	0.912E-14	0.376E-14	0.647E-15	0.935E-16
1.40	0.150	0.860E-14	0.364E-14	0.633E-15	0.918E-16
1.40	0.200	0.807E-14	0.351E-14	0.618E-15	0.900E-16
1.40	0.250	0.754E-14	0.338E-14	0.603E-15	0.882E-16
1.40	0.300	0.701E-14	0.324E-14	0.587E-15	0.863E-16
1.40	0.350	0.646E-14	0.309E-14	0.571E-15	0.843E-16
1.40	0.400	0.592E-14	0.294E-14	0.553E-15	0.821E-16
1.40	0.450	0.537E-14	0.279E-14	0.535E-15	0.799E-16
1.40	0.500	0.482E-14	0.262E-14	0.515E-15	0.774E-16
1.40	0.550	0.426E-14	0.245E-14	0.493E-15	0.748E-16
1.40	0.600	0.370E-14	0.226E-14	0.470E-15	0.720E-16
1.40	0.620	0.348E-14	0.219E-14	0.461E-15	0.707E-16
1.40	0.640	0.326E-14	0.211E-14	0.450E-15	0.695E-16
1.40	0.660	0.304E-14	0.203E-14	0.440E-15	0.682E-16
1.40	0.680	0.281E-14	0.194E-14	0.429E-15	0.668E-16
1.40	0.700	0.259E-14	0.186E-14	0.417E-15	0.654E-16
1.60	0.000	0.771E-14	0.342E-14	0.608E-15	0.888E-16
1.60	0.050	0.730E-14	0.331E-14	0.596E-15	0.874E-16
1.60	0.100	0.689E-14	0.321E-14	0.584E-15	0.859E-16
1.60	0.150	0.647E-14	0.310E-14	0.571E-15	0.843E-16
1.60	0.200	0.606E-14	0.298E-14	0.558E-15	0.827E-16
1.60	0.250	0.564E-14	0.286E-14	0.544E-15	0.810E-16
1.60	0.300	0.521E-14	0.274E-14	0.529E-15	0.792E-16
1.60	0.350	0.479E-14	0.261E-14	0.514E-15	0.773E-16
1.60	0.400	0.436E-14	0.248E-14	0.498E-15	0.753E-16
1.60	0.450	0.394E-14	0.234E-14	0.480E-15	0.732E-16
1.60	0.500	0.351E-14	0.220E-14	0.462E-15	0.709E-16
1.60	0.550	0.309E-14	0.204E-14	0.442E-15	0.685E-16
1.60	0.600	0.266E-14	0.188E-14	0.421E-15	0.658E-16
1.60	0.620	0.249E-14	0.182E-14	0.412E-15	0.647E-16
1.60	0.640	0.233E-14	0.175E-14	0.403E-15	0.635E-16
1.60	0.660	0.216E-14	0.168E-14	0.393E-15	0.623E-16
1.60	0.680	0.199E-14	0.160E-14	0.383E-15	0.610E-16
1.60	0.700	0.183E-14	0.153E-14	0.372E-15	0.597E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
1.80	0.000	0.597E-14	0.296E-14	0.555E-15	0.824E-16
1.80	0.050	0.564E-14	0.287E-14	0.544E-15	0.810E-16
1.80	0.100	0.531E-14	0.277E-14	0.532E-15	0.796E-16
1.80	0.150	0.497E-14	0.267E-14	0.521E-15	0.781E-16
1.80	0.200	0.464E-14	0.257E-14	0.508E-15	0.766E-16
1.80	0.250	0.430E-14	0.246E-14	0.495E-15	0.750E-16
1.80	0.300	0.396E-14	0.235E-14	0.481E-15	0.733E-16
1.80	0.350	0.363E-14	0.224E-14	0.467E-15	0.716E-16
1.80	0.400	0.329E-14	0.212E-14	0.452E-15	0.697E-16
1.80	0.450	0.296E-14	0.200E-14	0.436E-15	0.677E-16
1.80	0.500	0.262E-14	0.187E-14	0.419E-15	0.656E-16
1.80	0.550	0.229E-14	0.173E-14	0.401E-15	0.633E-16
1.80	0.600	0.196E-14	0.159E-14	0.381E-15	0.608E-16
1.80	0.620	0.183E-14	0.153E-14	0.372E-15	0.597E-16
1.80	0.640	0.170E-14	0.147E-14	0.364E-15	0.586E-16
1.80	0.660	0.157E-14	0.141E-14	0.355E-15	0.575E-16
1.80	0.680	0.145E-14	0.134E-14	0.345E-15	0.563E-16
1.80	0.700	0.132E-14	0.128E-14	0.336E-15	0.550E-16
2.00	0.000	0.470E-14	0.259E-14	0.511E-15	0.769E-16
2.00	0.050	0.443E-14	0.250E-14	0.500E-15	0.756E-16
2.00	0.100	0.416E-14	0.242E-14	0.489E-15	0.743E-16
2.00	0.150	0.389E-14	0.233E-14	0.478E-15	0.729E-16
2.00	0.200	0.361E-14	0.223E-14	0.467E-15	0.715E-16
2.00	0.250	0.334E-14	0.214E-14	0.454E-15	0.700E-16
2.00	0.300	0.307E-14	0.204E-14	0.442E-15	0.684E-16
2.00	0.350	0.280E-14	0.194E-14	0.428E-15	0.667E-16
2.00	0.400	0.253E-14	0.183E-14	0.414E-15	0.649E-16
2.00	0.450	0.226E-14	0.172E-14	0.399E-15	0.630E-16
2.00	0.500	0.199E-14	0.160E-14	0.383E-15	0.610E-16
2.00	0.550	0.173E-14	0.148E-14	0.366E-15	0.589E-16
2.00	0.600	0.147E-14	0.136E-14	0.347E-15	0.565E-16
2.00	0.620	0.137E-14	0.130E-14	0.339E-15	0.555E-16
2.00	0.640	0.127E-14	0.125E-14	0.331E-15	0.545E-16
2.00	0.660	0.117E-14	0.119E-14	0.323E-15	0.534E-16
2.00	0.680	0.107E-14	0.114E-14	0.314E-15	0.523E-16
2.00	0.700	0.977E-15	0.108E-14	0.305E-15	0.511E-16
2.50	0.000	0.274E-14	0.191E-14	0.425E-15	0.664E-16
2.50	0.050	0.257E-14	0.185E-14	0.416E-15	0.652E-16
2.50	0.100	0.240E-14	0.178E-14	0.407E-15	0.640E-16
2.50	0.150	0.223E-14	0.171E-14	0.397E-15	0.628E-16
2.50	0.200	0.206E-14	0.163E-14	0.387E-15	0.615E-16
2.50	0.250	0.189E-14	0.156E-14	0.376E-15	0.602E-16
2.50	0.300	0.172E-14	0.148E-14	0.365E-15	0.588E-16
2.50	0.350	0.155E-14	0.140E-14	0.353E-15	0.573E-16
2.50	0.400	0.139E-14	0.131E-14	0.341E-15	0.557E-16
2.50	0.450	0.123E-14	0.123E-14	0.328E-15	0.540E-16
2.50	0.500	0.107E-14	0.114E-14	0.314E-15	0.523E-16
2.50	0.550	0.920E-15	0.105E-14	0.299E-15	0.503E-16
2.50	0.600	0.772E-15	0.948E-15	0.283E-15	0.483E-16
2.50	0.620	0.714E-15	0.908E-15	0.277E-15	0.474E-16
2.50	0.640	0.657E-15	0.868E-15	0.270E-15	0.465E-16
2.50	0.660	0.601E-15	0.826E-15	0.262E-15	0.455E-16
2.50	0.680	0.546E-15	0.784E-15	0.255E-15	0.445E-16
2.50	0.700	0.493E-15	0.740E-15	0.247E-15	0.435E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
3.00	0.000	0.170E-14	0.147E-14	0.364E-15	0.586E-16
3.00	0.050	0.159E-14	0.141E-14	0.356E-15	0.576E-16
3.00	0.100	0.147E-14	0.136E-14	0.347E-15	0.565E-16
3.00	0.150	0.136E-14	0.130E-14	0.339E-15	0.554E-16
3.00	0.200	0.125E-14	0.124E-14	0.330E-15	0.542E-16
3.00	0.250	0.114E-14	0.118E-14	0.320E-15	0.530E-16
3.00	0.300	0.103E-14	0.111E-14	0.310E-15	0.517E-16
3.00	0.350	0.925E-15	0.105E-14	0.300E-15	0.504E-16
3.00	0.400	0.821E-15	0.981E-15	0.289E-15	0.490E-16
3.00	0.450	0.719E-15	0.912E-15	0.277E-15	0.475E-16
3.00	0.500	0.621E-15	0.841E-15	0.265E-15	0.458E-16
3.00	0.550	0.526E-15	0.768E-15	0.252E-15	0.441E-16
3.00	0.600	0.435E-15	0.691E-15	0.238E-15	0.422E-16
3.00	0.620	0.400E-15	0.660E-15	0.232E-15	0.414E-16
3.00	0.640	0.366E-15	0.628E-15	0.226E-15	0.406E-16
3.00	0.660	0.333E-15	0.596E-15	0.219E-15	0.397E-16
3.00	0.680	0.300E-15	0.563E-15	0.213E-15	0.388E-16
3.00	0.700	0.269E-15	0.530E-15	0.206E-15	0.379E-16
3.50	0.000	0.111E-14	0.116E-14	0.317E-15	0.526E-16
3.50	0.050	0.103E-14	0.111E-14	0.310E-15	0.517E-16
3.50	0.100	0.948E-15	0.106E-14	0.302E-15	0.507E-16
3.50	0.150	0.871E-15	0.101E-14	0.294E-15	0.497E-16
3.50	0.200	0.796E-15	0.965E-15	0.286E-15	0.486E-16
3.50	0.250	0.721E-15	0.914E-15	0.278E-15	0.475E-16
3.50	0.300	0.649E-15	0.862E-15	0.269E-15	0.463E-16
3.50	0.350	0.578E-15	0.808E-15	0.259E-15	0.451E-16
3.50	0.400	0.509E-15	0.754E-15	0.250E-15	0.438E-16
3.50	0.450	0.443E-15	0.698E-15	0.239E-15	0.424E-16
3.50	0.500	0.379E-15	0.640E-15	0.228E-15	0.409E-16
3.50	0.550	0.318E-15	0.581E-15	0.216E-15	0.393E-16
3.50	0.600	0.260E-15	0.519E-15	0.204E-15	0.376E-16
3.50	0.620	0.238E-15	0.494E-15	0.199E-15	0.369E-16
3.50	0.640	0.216E-15	0.469E-15	0.193E-15	0.361E-16
3.50	0.660	0.195E-15	0.443E-15	0.187E-15	0.353E-16
3.50	0.680	0.175E-15	0.417E-15	0.181E-15	0.345E-16
3.50	0.700	0.156E-15	0.391E-15	0.175E-15	0.336E-16
4.00	0.000	0.744E-15	0.930E-15	0.280E-15	0.478E-16
4.00	0.050	0.688E-15	0.890E-15	0.274E-15	0.470E-16
4.00	0.100	0.633E-15	0.850E-15	0.267E-15	0.461E-16
4.00	0.150	0.579E-15	0.809E-15	0.259E-15	0.451E-16
4.00	0.200	0.526E-15	0.768E-15	0.252E-15	0.441E-16
4.00	0.250	0.475E-15	0.725E-15	0.244E-15	0.431E-16
4.00	0.300	0.424E-15	0.682E-15	0.236E-15	0.420E-16
4.00	0.350	0.376E-15	0.637E-15	0.228E-15	0.408E-16
4.00	0.400	0.329E-15	0.592E-15	0.219E-15	0.396E-16
4.00	0.450	0.284E-15	0.545E-15	0.209E-15	0.383E-16
4.00	0.500	0.241E-15	0.498E-15	0.199E-15	0.370E-16
4.00	0.550	0.200E-15	0.449E-15	0.189E-15	0.355E-16
4.00	0.600	0.162E-15	0.399E-15	0.177E-15	0.339E-16
4.00	0.620	0.147E-15	0.379E-15	0.172E-15	0.332E-16
4.00	0.640	0.133E-15	0.359E-15	0.168E-15	0.325E-16
4.00	0.660	0.120E-15	0.338E-15	0.162E-15	0.318E-16
4.00	0.680	0.107E-15	0.317E-15	0.157E-15	0.310E-16
4.00	0.700	0.943E-16	0.296E-15	0.152E-15	0.302E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
4.50	0.000	0.516E-15	0.759E-15	0.251E-15	0.439E-16
4.50	0.050	0.475E-15	0.726E-15	0.244E-15	0.431E-16
4.50	0.100	0.435E-15	0.691E-15	0.238E-15	0.422E-16
4.50	0.150	0.397E-15	0.656E-15	0.231E-15	0.413E-16
4.50	0.200	0.359E-15	0.621E-15	0.224E-15	0.404E-16
4.50	0.250	0.322E-15	0.585E-15	0.217E-15	0.394E-16
4.50	0.300	0.286E-15	0.548E-15	0.210E-15	0.384E-16
4.50	0.350	0.252E-15	0.511E-15	0.202E-15	0.373E-16
4.50	0.400	0.219E-15	0.473E-15	0.194E-15	0.362E-16
4.50	0.450	0.188E-15	0.434E-15	0.185E-15	0.350E-16
4.50	0.500	0.158E-15	0.394E-15	0.176E-15	0.337E-16
4.50	0.550	0.130E-15	0.354E-15	0.166E-15	0.324E-16
4.50	0.600	0.104E-15	0.313E-15	0.156E-15	0.309E-16
4.50	0.620	0.944E-16	0.296E-15	0.152E-15	0.302E-16
4.50	0.640	0.850E-16	0.280E-15	0.147E-15	0.296E-16
4.50	0.660	0.760E-16	0.263E-15	0.142E-15	0.289E-16
4.50	0.680	0.674E-16	0.246E-15	0.138E-15	0.282E-16
4.50	0.700	0.592E-16	0.229E-15	0.133E-15	0.274E-16
5.00	0.000	0.366E-15	0.628E-15	0.226E-15	0.406E-16
5.00	0.050	0.336E-15	0.599E-15	0.220E-15	0.398E-16
5.00	0.100	0.307E-15	0.570E-15	0.214E-15	0.390E-16
5.00	0.150	0.278E-15	0.540E-15	0.208E-15	0.382E-16
5.00	0.200	0.251E-15	0.509E-15	0.202E-15	0.373E-16
5.00	0.250	0.224E-15	0.479E-15	0.195E-15	0.364E-16
5.00	0.300	0.198E-15	0.447E-15	0.188E-15	0.354E-16
5.00	0.350	0.174E-15	0.415E-15	0.181E-15	0.344E-16
5.00	0.400	0.150E-15	0.383E-15	0.173E-15	0.334E-16
5.00	0.450	0.128E-15	0.350E-15	0.165E-15	0.322E-16
5.00	0.500	0.107E-15	0.317E-15	0.157E-15	0.310E-16
5.00	0.550	0.871E-16	0.283E-15	0.148E-15	0.297E-16
5.00	0.600	0.691E-16	0.249E-15	0.139E-15	0.283E-16
5.00	0.620	0.623E-16	0.235E-15	0.135E-15	0.277E-16
5.00	0.640	0.559E-16	0.221E-15	0.130E-15	0.271E-16
5.00	0.660	0.497E-16	0.207E-15	0.126E-15	0.265E-16
5.00	0.680	0.439E-16	0.193E-15	0.122E-15	0.258E-16
5.00	0.700	0.383E-16	0.179E-15	0.117E-15	0.251E-16
5.50	0.000	0.265E-15	0.526E-15	0.205E-15	0.378E-16
5.50	0.050	0.243E-15	0.500E-15	0.200E-15	0.370E-16
5.50	0.100	0.221E-15	0.475E-15	0.194E-15	0.363E-16
5.50	0.150	0.200E-15	0.449E-15	0.189E-15	0.355E-16
5.50	0.200	0.179E-15	0.423E-15	0.183E-15	0.347E-16
5.50	0.250	0.159E-15	0.396E-15	0.176E-15	0.338E-16
5.50	0.300	0.140E-15	0.369E-15	0.170E-15	0.329E-16
5.50	0.350	0.122E-15	0.342E-15	0.163E-15	0.319E-16
5.50	0.400	0.105E-15	0.314E-15	0.156E-15	0.309E-16
5.50	0.450	0.888E-16	0.286E-15	0.149E-15	0.298E-16
5.50	0.500	0.737E-16	0.258E-15	0.141E-15	0.287E-16
5.50	0.550	0.597E-16	0.230E-15	0.133E-15	0.275E-16
5.50	0.600	0.469E-16	0.201E-15	0.124E-15	0.262E-16
5.50	0.620	0.422E-16	0.189E-15	0.120E-15	0.256E-16
5.50	0.640	0.376E-16	0.178E-15	0.117E-15	0.250E-16
5.50	0.660	0.333E-16	0.166E-15	0.113E-15	0.244E-16
5.50	0.680	0.293E-16	0.154E-15	0.109E-15	0.238E-16
5.50	0.700	0.254E-16	0.143E-15	0.104E-15	0.231E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
6.00	0.000	0.195E-15	0.444E-15	0.187E-15	0.353E-16
6.00	0.050	0.178E-15	0.422E-15	0.182E-15	0.346E-16
6.00	0.100	0.162E-15	0.399E-15	0.177E-15	0.339E-16
6.00	0.150	0.146E-15	0.377E-15	0.172E-15	0.331E-16
6.00	0.200	0.130E-15	0.354E-15	0.166E-15	0.324E-16
6.00	0.250	0.115E-15	0.331E-15	0.161E-15	0.315E-16
6.00	0.300	0.101E-15	0.308E-15	0.155E-15	0.307E-16
6.00	0.350	0.876E-16	0.284E-15	0.148E-15	0.298E-16
6.00	0.400	0.749E-16	0.261E-15	0.142E-15	0.288E-16
6.00	0.450	0.630E-16	0.237E-15	0.135E-15	0.278E-16
6.00	0.500	0.519E-16	0.212E-15	0.128E-15	0.267E-16
6.00	0.550	0.417E-16	0.188E-15	0.120E-15	0.256E-16
6.00	0.600	0.325E-16	0.164E-15	0.112E-15	0.243E-16
6.00	0.620	0.291E-16	0.154E-15	0.108E-15	0.238E-16
6.00	0.640	0.259E-16	0.144E-15	0.105E-15	0.232E-16
6.00	0.660	0.228E-16	0.134E-15	0.101E-15	0.226E-16
6.00	0.680	0.199E-16	0.125E-15	0.976E-16	0.221E-16
6.00	0.700	0.172E-16	0.115E-15	0.937E-16	0.214E-16
6.50	0.000	0.146E-15	0.378E-15	0.172E-15	0.332E-16
6.50	0.050	0.133E-15	0.358E-15	0.167E-15	0.325E-16
6.50	0.100	0.120E-15	0.339E-15	0.163E-15	0.318E-16
6.50	0.150	0.108E-15	0.319E-15	0.158E-15	0.311E-16
6.50	0.200	0.961E-16	0.299E-15	0.152E-15	0.303E-16
6.50	0.250	0.848E-16	0.279E-15	0.147E-15	0.296E-16
6.50	0.300	0.740E-16	0.259E-15	0.141E-15	0.287E-16
6.50	0.350	0.639E-16	0.238E-15	0.136E-15	0.279E-16
6.50	0.400	0.543E-16	0.218E-15	0.129E-15	0.270E-16
6.50	0.450	0.454E-16	0.197E-15	0.123E-15	0.260E-16
6.50	0.500	0.372E-16	0.176E-15	0.116E-15	0.250E-16
6.50	0.550	0.297E-16	0.156E-15	0.109E-15	0.239E-16
6.50	0.600	0.230E-16	0.135E-15	0.101E-15	0.227E-16
6.50	0.620	0.205E-16	0.126E-15	0.983E-16	0.222E-16
6.50	0.640	0.181E-16	0.118E-15	0.950E-16	0.216E-16
6.50	0.660	0.159E-16	0.110E-15	0.916E-16	0.211E-16
6.50	0.680	0.139E-16	0.102E-15	0.881E-16	0.205E-16
6.50	0.700	0.119E-16	0.934E-16	0.845E-16	0.199E-16
7.00	0.000	0.111E-15	0.324E-15	0.159E-15	0.313E-16
7.00	0.050	0.101E-15	0.307E-15	0.154E-15	0.306E-16
7.00	0.100	0.906E-16	0.290E-15	0.150E-15	0.300E-16
7.00	0.150	0.810E-16	0.272E-15	0.145E-15	0.293E-16
7.00	0.200	0.719E-16	0.255E-15	0.140E-15	0.286E-16
7.00	0.250	0.632E-16	0.237E-15	0.135E-15	0.278E-16
7.00	0.300	0.550E-16	0.219E-15	0.130E-15	0.270E-16
7.00	0.350	0.472E-16	0.201E-15	0.124E-15	0.262E-16
7.00	0.400	0.400E-16	0.184E-15	0.119E-15	0.253E-16
7.00	0.450	0.332E-16	0.166E-15	0.113E-15	0.244E-16
7.00	0.500	0.271E-16	0.148E-15	0.106E-15	0.234E-16
7.00	0.550	0.215E-16	0.130E-15	0.996E-16	0.224E-16
7.00	0.600	0.165E-16	0.112E-15	0.925E-16	0.212E-16
7.00	0.620	0.146E-16	0.105E-15	0.895E-16	0.208E-16
7.00	0.640	0.129E-16	0.976E-16	0.864E-16	0.203E-16
7.00	0.660	0.113E-16	0.906E-16	0.833E-16	0.197E-16
7.00	0.680	0.978E-17	0.836E-16	0.800E-16	0.192E-16
7.00	0.700	0.837E-17	0.766E-16	0.767E-16	0.186E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 µm	Flux at 25 µm	Flux at 60 µm	Flux at 100 µm
7.50	0.000	0.850E-16	0.280E-15	0.147E-15	0.296E-16
7.50	0.050	0.769E-16	0.264E-15	0.143E-15	0.290E-16
7.50	0.100	0.691E-16	0.249E-15	0.139E-15	0.283E-16
7.50	0.150	0.616E-16	0.234E-15	0.134E-15	0.277E-16
7.50	0.200	0.545E-16	0.218E-15	0.130E-15	0.270E-16
7.50	0.250	0.477E-16	0.203E-15	0.125E-15	0.263E-16
7.50	0.300	0.413E-16	0.187E-15	0.120E-15	0.255E-16
7.50	0.350	0.354E-16	0.171E-15	0.115E-15	0.247E-16
7.50	0.400	0.298E-16	0.156E-15	0.109E-15	0.239E-16
7.50	0.450	0.246E-16	0.140E-15	0.104E-15	0.230E-16
7.50	0.500	0.199E-16	0.125E-15	0.976E-16	0.221E-16
7.50	0.550	0.157E-16	0.109E-15	0.913E-16	0.210E-16
7.50	0.600	0.120E-16	0.935E-16	0.846E-16	0.200E-16
7.50	0.620	0.106E-16	0.874E-16	0.818E-16	0.195E-16
7.50	0.640	0.932E-17	0.813E-16	0.790E-16	0.190E-16
7.50	0.660	0.812E-17	0.753E-16	0.760E-16	0.185E-16
7.50	0.680	0.700E-17	0.693E-16	0.730E-16	0.180E-16
7.50	0.700	0.597E-17	0.634E-16	0.699E-16	0.175E-16
8.00	0.000	0.659E-16	0.243E-15	0.137E-15	0.281E-16
8.00	0.050	0.594E-16	0.229E-15	0.133E-15	0.275E-16
8.00	0.100	0.532E-16	0.215E-15	0.129E-15	0.269E-16
8.00	0.150	0.473E-16	0.202E-15	0.124E-15	0.262E-16
8.00	0.200	0.417E-16	0.188E-15	0.120E-15	0.256E-16
8.00	0.250	0.364E-16	0.174E-15	0.116E-15	0.249E-16
8.00	0.300	0.314E-16	0.161E-15	0.111E-15	0.241E-16
8.00	0.350	0.268E-16	0.147E-15	0.106E-15	0.234E-16
8.00	0.400	0.225E-16	0.133E-15	0.101E-15	0.226E-16
8.00	0.450	0.185E-16	0.119E-15	0.955E-16	0.217E-16
8.00	0.500	0.149E-16	0.106E-15	0.899E-16	0.208E-16
8.00	0.550	0.116E-16	0.922E-16	0.840E-16	0.199E-16
8.00	0.600	0.880E-17	0.788E-16	0.777E-16	0.188E-16
8.00	0.620	0.777E-17	0.735E-16	0.751E-16	0.184E-16
8.00	0.640	0.681E-17	0.682E-16	0.724E-16	0.179E-16
8.00	0.660	0.591E-17	0.630E-16	0.697E-16	0.174E-16
8.00	0.680	0.508E-17	0.579E-16	0.668E-16	0.169E-16
8.00	0.700	0.431E-17	0.528E-16	0.639E-16	0.164E-16
8.50	0.000	0.515E-16	0.212E-15	0.128E-15	0.267E-16
8.50	0.050	0.464E-16	0.199E-15	0.124E-15	0.261E-16
8.50	0.100	0.414E-16	0.187E-15	0.120E-15	0.255E-16
8.50	0.150	0.367E-16	0.175E-15	0.116E-15	0.249E-16
8.50	0.200	0.323E-16	0.163E-15	0.112E-15	0.243E-16
8.50	0.250	0.281E-16	0.151E-15	0.107E-15	0.236E-16
8.50	0.300	0.242E-16	0.139E-15	0.103E-15	0.229E-16
8.50	0.350	0.205E-16	0.126E-15	0.983E-16	0.222E-16
8.50	0.400	0.171E-16	0.114E-15	0.935E-16	0.214E-16
8.50	0.450	0.140E-16	0.102E-15	0.884E-16	0.206E-16
8.50	0.500	0.112E-16	0.903E-16	0.831E-16	0.197E-16
8.50	0.550	0.873E-17	0.784E-16	0.776E-16	0.188E-16
8.50	0.600	0.655E-17	0.668E-16	0.717E-16	0.178E-16
8.50	0.620	0.577E-17	0.622E-16	0.692E-16	0.174E-16
8.50	0.640	0.503E-17	0.576E-16	0.667E-16	0.169E-16
8.50	0.660	0.435E-17	0.531E-16	0.641E-16	0.165E-16
8.50	0.680	0.373E-17	0.487E-16	0.614E-16	0.160E-16
8.50	0.700	0.315E-17	0.443E-16	0.587E-16	0.155E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
9.00	0.000	0.407E-16	0.185E-15	0.119E-15	0.254E-16
9.00	0.050	0.365E-16	0.175E-15	0.116E-15	0.249E-16
9.00	0.100	0.325E-16	0.164E-15	0.112E-15	0.243E-16
9.00	0.150	0.288E-16	0.153E-15	0.108E-15	0.237E-16
9.00	0.200	0.252E-16	0.142E-15	0.104E-15	0.231E-16
9.00	0.250	0.218E-16	0.131E-15	0.100E-15	0.225E-16
9.00	0.300	0.187E-16	0.120E-15	0.959E-16	0.218E-16
9.00	0.350	0.158E-16	0.109E-15	0.915E-16	0.211E-16
9.00	0.400	0.132E-16	0.987E-16	0.869E-16	0.203E-16
9.00	0.450	0.107E-16	0.880E-16	0.821E-16	0.195E-16
9.00	0.500	0.854E-17	0.775E-16	0.771E-16	0.187E-16
9.00	0.550	0.660E-17	0.671E-16	0.718E-16	0.178E-16
9.00	0.600	0.492E-17	0.569E-16	0.663E-16	0.168E-16
9.00	0.620	0.432E-17	0.529E-16	0.640E-16	0.164E-16
9.00	0.640	0.376E-17	0.489E-16	0.616E-16	0.160E-16
9.00	0.660	0.324E-17	0.450E-16	0.591E-16	0.156E-16
9.00	0.680	0.276E-17	0.411E-16	0.566E-16	0.151E-16
9.00	0.700	0.233E-17	0.374E-16	0.540E-16	0.147E-16
9.50	0.000	0.323E-16	0.163E-15	0.112E-15	0.243E-16
9.50	0.050	0.289E-16	0.153E-15	0.108E-15	0.237E-16
9.50	0.100	0.257E-16	0.144E-15	0.105E-15	0.232E-16
9.50	0.150	0.227E-16	0.134E-15	0.101E-15	0.226E-16
9.50	0.200	0.198E-16	0.124E-15	0.974E-16	0.220E-16
9.50	0.250	0.171E-16	0.114E-15	0.935E-16	0.214E-16
9.50	0.300	0.146E-16	0.105E-15	0.895E-16	0.208E-16
9.50	0.350	0.123E-16	0.951E-16	0.853E-16	0.201E-16
9.50	0.400	0.102E-16	0.856E-16	0.810E-16	0.194E-16
9.50	0.450	0.828E-17	0.761E-16	0.765E-16	0.186E-16
9.50	0.500	0.656E-17	0.668E-16	0.717E-16	0.178E-16
9.50	0.550	0.504E-17	0.577E-16	0.667E-16	0.169E-16
9.50	0.600	0.373E-17	0.487E-16	0.615E-16	0.160E-16
9.50	0.620	0.327E-17	0.452E-16	0.593E-16	0.156E-16
9.50	0.640	0.283E-17	0.417E-16	0.570E-16	0.152E-16
9.50	0.660	0.243E-17	0.383E-16	0.547E-16	0.148E-16
9.50	0.680	0.207E-17	0.350E-16	0.524E-16	0.143E-16
9.50	0.700	0.173E-17	0.317E-16	0.499E-16	0.139E-16
10.00	0.000	0.259E-16	0.144E-15	0.105E-15	0.232E-16
10.00	0.050	0.231E-16	0.135E-15	0.102E-15	0.227E-16
10.00	0.100	0.205E-16	0.126E-15	0.983E-16	0.222E-16
10.00	0.150	0.180E-16	0.118E-15	0.949E-16	0.216E-16
10.00	0.200	0.157E-16	0.109E-15	0.913E-16	0.210E-16
10.00	0.250	0.135E-16	0.100E-15	0.876E-16	0.204E-16
10.00	0.300	0.115E-16	0.916E-16	0.838E-16	0.198E-16
10.00	0.350	0.967E-17	0.830E-16	0.798E-16	0.192E-16
10.00	0.400	0.797E-17	0.745E-16	0.757E-16	0.185E-16
10.00	0.450	0.644E-17	0.662E-16	0.714E-16	0.177E-16
10.00	0.500	0.508E-17	0.579E-16	0.668E-16	0.169E-16
10.00	0.550	0.388E-17	0.498E-16	0.621E-16	0.161E-16
10.00	0.600	0.286E-17	0.419E-16	0.571E-16	0.152E-16
10.00	0.620	0.249E-17	0.388E-16	0.551E-16	0.148E-16
10.00	0.640	0.215E-17	0.358E-16	0.529E-16	0.144E-16
10.00	0.660	0.185E-17	0.328E-16	0.508E-16	0.140E-16
10.00	0.680	0.156E-17	0.299E-16	0.485E-16	0.136E-16
10.00	0.700	0.130E-17	0.270E-16	0.462E-16	0.132E-16

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
11.00	0.000	0.169E-16	0.114E-15	0.932E-16	0.214E-16
11.00	0.050	0.150E-16	0.106E-15	0.902E-16	0.209E-16
11.00	0.100	0.133E-16	0.992E-16	0.871E-16	0.204E-16
11.00	0.150	0.116E-16	0.921E-16	0.840E-16	0.198E-16
11.00	0.200	0.101E-16	0.850E-16	0.807E-16	0.193E-16
11.00	0.250	0.863E-17	0.779E-16	0.773E-16	0.187E-16
11.00	0.300	0.729E-17	0.709E-16	0.738E-16	0.182E-16
11.00	0.350	0.608E-17	0.640E-16	0.702E-16	0.175E-16
11.00	0.400	0.497E-17	0.572E-16	0.665E-16	0.169E-16
11.00	0.450	0.398E-17	0.505E-16	0.626E-16	0.162E-16
11.00	0.500	0.311E-17	0.440E-16	0.585E-16	0.155E-16
11.00	0.550	0.235E-17	0.376E-16	0.542E-16	0.147E-16
11.00	0.600	0.171E-17	0.314E-16	0.497E-16	0.138E-16
11.00	0.620	0.148E-17	0.290E-16	0.479E-16	0.135E-16
11.00	0.640	0.127E-17	0.267E-16	0.459E-16	0.131E-16
11.00	0.660	0.108E-17	0.244E-16	0.440E-16	0.127E-16
11.00	0.680	0.912E-18	0.221E-16	0.420E-16	0.124E-16
11.00	0.700	0.756E-18	0.199E-16	0.399E-16	0.119E-16
12.00	0.000	0.113E-16	0.907E-16	0.833E-16	0.197E-16
12.00	0.050	0.100E-16	0.847E-16	0.806E-16	0.193E-16
12.00	0.100	0.880E-17	0.788E-16	0.777E-16	0.188E-16
12.00	0.150	0.766E-17	0.729E-16	0.748E-16	0.183E-16
12.00	0.200	0.660E-17	0.671E-16	0.718E-16	0.178E-16
12.00	0.250	0.563E-17	0.613E-16	0.688E-16	0.173E-16
12.00	0.300	0.473E-17	0.556E-16	0.656E-16	0.167E-16
12.00	0.350	0.391E-17	0.500E-16	0.623E-16	0.161E-16
12.00	0.400	0.318E-17	0.445E-16	0.588E-16	0.155E-16
12.00	0.450	0.253E-17	0.391E-16	0.553E-16	0.149E-16
12.00	0.500	0.195E-17	0.339E-16	0.516E-16	0.142E-16
12.00	0.550	0.146E-17	0.288E-16	0.477E-16	0.135E-16
12.00	0.600	0.105E-17	0.239E-16	0.436E-16	0.127E-16
12.00	0.620	0.906E-18	0.220E-16	0.419E-16	0.123E-16
12.00	0.640	0.775E-18	0.202E-16	0.402E-16	0.120E-16
12.00	0.660	0.655E-18	0.184E-16	0.384E-16	0.116E-16
12.00	0.680	0.547E-18	0.166E-16	0.366E-16	0.113E-16
12.00	0.700	0.450E-18	0.149E-16	0.348E-16	0.109E-16
13.00	0.000	0.771E-17	0.731E-16	0.750E-16	0.183E-16
13.00	0.050	0.680E-17	0.682E-16	0.724E-16	0.179E-16
13.00	0.100	0.595E-17	0.633E-16	0.698E-16	0.175E-16
13.00	0.150	0.515E-17	0.584E-16	0.671E-16	0.170E-16
13.00	0.200	0.442E-17	0.536E-16	0.644E-16	0.165E-16
13.00	0.250	0.375E-17	0.488E-16	0.615E-16	0.160E-16
13.00	0.300	0.313E-17	0.441E-16	0.586E-16	0.155E-16
13.00	0.350	0.257E-17	0.395E-16	0.555E-16	0.149E-16
13.00	0.400	0.208E-17	0.350E-16	0.524E-16	0.143E-16
13.00	0.450	0.164E-17	0.307E-16	0.491E-16	0.137E-16
13.00	0.500	0.125E-17	0.264E-16	0.458E-16	0.131E-16
13.00	0.550	0.930E-18	0.223E-16	0.422E-16	0.124E-16
13.00	0.600	0.660E-18	0.184E-16	0.385E-16	0.117E-16
13.00	0.620	0.567E-18	0.169E-16	0.370E-16	0.113E-16
13.00	0.640	0.482E-18	0.154E-16	0.354E-16	0.110E-16
13.00	0.660	0.405E-18	0.140E-16	0.338E-16	0.107E-16
13.00	0.680	0.336E-18	0.126E-16	0.322E-16	0.103E-16
13.00	0.700	0.275E-18	0.113E-16	0.305E-16	0.997E-17

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
14.00	0.000	0.534E-17	0.596E-16	0.678E-16	0.171E-16
14.00	0.050	0.469E-17	0.554E-16	0.654E-16	0.167E-16
14.00	0.100	0.409E-17	0.513E-16	0.630E-16	0.163E-16
14.00	0.150	0.353E-17	0.472E-16	0.605E-16	0.158E-16
14.00	0.200	0.301E-17	0.432E-16	0.580E-16	0.154E-16
14.00	0.250	0.254E-17	0.392E-16	0.553E-16	0.149E-16
14.00	0.300	0.211E-17	0.354E-16	0.526E-16	0.144E-16
14.00	0.350	0.172E-17	0.316E-16	0.498E-16	0.139E-16
14.00	0.400	0.138E-17	0.279E-16	0.469E-16	0.133E-16
14.00	0.450	0.108E-17	0.243E-16	0.440E-16	0.127E-16
14.00	0.500	0.821E-18	0.208E-16	0.408E-16	0.121E-16
14.00	0.550	0.603E-18	0.175E-16	0.376E-16	0.115E-16
14.00	0.600	0.423E-18	0.144E-16	0.342E-16	0.108E-16
14.00	0.620	0.362E-18	0.132E-16	0.328E-16	0.105E-16
14.00	0.640	0.306E-18	0.120E-16	0.314E-16	0.102E-16
14.00	0.660	0.256E-18	0.108E-16	0.299E-16	0.985E-17
14.00	0.680	0.211E-18	0.973E-17	0.285E-16	0.952E-17
14.00	0.700	0.171E-18	0.866E-17	0.269E-16	0.918E-17
15.00	0.000	0.376E-17	0.489E-16	0.616E-16	0.160E-16
15.00	0.050	0.329E-17	0.454E-16	0.594E-16	0.156E-16
15.00	0.100	0.286E-17	0.419E-16	0.571E-16	0.152E-16
15.00	0.150	0.245E-17	0.385E-16	0.548E-16	0.148E-16
15.00	0.200	0.208E-17	0.351E-16	0.525E-16	0.144E-16
15.00	0.250	0.175E-17	0.318E-16	0.500E-16	0.139E-16
15.00	0.300	0.144E-17	0.286E-16	0.475E-16	0.134E-16
15.00	0.350	0.117E-17	0.254E-16	0.449E-16	0.129E-16
15.00	0.400	0.934E-18	0.224E-16	0.423E-16	0.124E-16
15.00	0.450	0.725E-18	0.194E-16	0.395E-16	0.119E-16
15.00	0.500	0.547E-18	0.166E-16	0.366E-16	0.113E-16
15.00	0.550	0.398E-18	0.139E-16	0.337E-16	0.106E-16
15.00	0.600	0.276E-18	0.113E-16	0.306E-16	0.998E-17
15.00	0.620	0.235E-18	0.103E-16	0.293E-16	0.970E-17
15.00	0.640	0.198E-18	0.938E-17	0.280E-16	0.941E-17
15.00	0.660	0.164E-18	0.846E-17	0.266E-16	0.911E-17
15.00	0.680	0.135E-18	0.757E-17	0.253E-16	0.880E-17
15.00	0.700	0.109E-18	0.672E-17	0.239E-16	0.848E-17
16.00	0.000	0.268E-17	0.405E-16	0.562E-16	0.150E-16
16.00	0.050	0.234E-17	0.375E-16	0.541E-16	0.147E-16
16.00	0.100	0.202E-17	0.345E-16	0.520E-16	0.143E-16
16.00	0.150	0.173E-17	0.316E-16	0.499E-16	0.139E-16
16.00	0.200	0.146E-17	0.288E-16	0.477E-16	0.135E-16
16.00	0.250	0.122E-17	0.260E-16	0.454E-16	0.130E-16
16.00	0.300	0.100E-17	0.233E-16	0.431E-16	0.126E-16
16.00	0.350	0.810E-18	0.207E-16	0.407E-16	0.121E-16
16.00	0.400	0.641E-18	0.181E-16	0.382E-16	0.116E-16
16.00	0.450	0.494E-18	0.157E-16	0.357E-16	0.111E-16
16.00	0.500	0.370E-18	0.133E-16	0.330E-16	0.105E-16
16.00	0.550	0.267E-18	0.111E-16	0.303E-16	0.992E-17
16.00	0.600	0.183E-18	0.899E-17	0.274E-16	0.929E-17
16.00	0.620	0.155E-18	0.819E-17	0.262E-16	0.902E-17
16.00	0.640	0.130E-18	0.742E-17	0.250E-16	0.875E-17
16.00	0.660	0.107E-18	0.667E-17	0.238E-16	0.846E-17
16.00	0.680	0.876E-19	0.595E-17	0.226E-16	0.817E-17
16.00	0.700	0.703E-19	0.526E-17	0.213E-16	0.786E-17

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 µm	Flux at 25 µm	Flux at 60 µm	Flux at 100 µm
17.00	0.000	0.194E-17	0.337E-16	0.514E-16	0.142E-16
17.00	0.050	0.168E-17	0.312E-16	0.495E-16	0.138E-16
17.00	0.100	0.145E-17	0.286E-16	0.476E-16	0.134E-16
17.00	0.150	0.123E-17	0.262E-16	0.456E-16	0.130E-16
17.00	0.200	0.104E-17	0.238E-16	0.435E-16	0.126E-16
17.00	0.250	0.863E-18	0.214E-16	0.414E-16	0.122E-16
17.00	0.300	0.706E-18	0.191E-16	0.392E-16	0.118E-16
17.00	0.350	0.567E-18	0.169E-16	0.370E-16	0.113E-16
17.00	0.400	0.446E-18	0.148E-16	0.347E-16	0.109E-16
17.00	0.450	0.341E-18	0.127E-16	0.323E-16	0.104E-16
17.00	0.500	0.254E-18	0.108E-16	0.299E-16	0.983E-17
17.00	0.550	0.181E-18	0.893E-17	0.273E-16	0.927E-17
17.00	0.600	0.123E-18	0.720E-17	0.247E-16	0.867E-17
17.00	0.620	0.104E-18	0.655E-17	0.236E-16	0.841E-17
17.00	0.640	0.866E-19	0.591E-17	0.225E-16	0.815E-17
17.00	0.660	0.713E-19	0.530E-17	0.214E-16	0.788E-17
17.00	0.680	0.578E-19	0.472E-17	0.203E-16	0.760E-17
17.00	0.700	0.461E-19	0.416E-17	0.191E-16	0.732E-17
18.00	0.000	0.141E-17	0.282E-16	0.472E-16	0.134E-16
18.00	0.050	0.122E-17	0.261E-16	0.454E-16	0.130E-16
18.00	0.100	0.105E-17	0.239E-16	0.436E-16	0.127E-16
18.00	0.150	0.891E-18	0.218E-16	0.417E-16	0.123E-16
18.00	0.200	0.747E-18	0.198E-16	0.398E-16	0.119E-16
18.00	0.250	0.618E-18	0.178E-16	0.378E-16	0.115E-16
18.00	0.300	0.503E-18	0.158E-16	0.358E-16	0.111E-16
18.00	0.350	0.402E-18	0.140E-16	0.337E-16	0.107E-16
18.00	0.400	0.314E-18	0.121E-16	0.316E-16	0.102E-16
18.00	0.450	0.239E-18	0.104E-16	0.294E-16	0.973E-17
18.00	0.500	0.176E-18	0.879E-17	0.271E-16	0.922E-17
18.00	0.550	0.125E-18	0.725E-17	0.248E-16	0.868E-17
18.00	0.600	0.840E-19	0.581E-17	0.223E-16	0.811E-17
18.00	0.620	0.705E-19	0.527E-17	0.213E-16	0.787E-17
18.00	0.640	0.585E-19	0.475E-17	0.203E-16	0.762E-17
18.00	0.660	0.479E-19	0.425E-17	0.193E-16	0.736E-17
18.00	0.680	0.387E-19	0.377E-17	0.182E-16	0.710E-17
18.00	0.700	0.307E-19	0.331E-17	0.172E-16	0.682E-17
19.00	0.000	0.104E-17	0.238E-16	0.435E-16	0.127E-16
19.00	0.050	0.899E-18	0.219E-16	0.418E-16	0.123E-16
19.00	0.100	0.768E-18	0.201E-16	0.401E-16	0.120E-16
19.00	0.150	0.650E-18	0.183E-16	0.384E-16	0.116E-16
19.00	0.200	0.542E-18	0.165E-16	0.366E-16	0.113E-16
19.00	0.250	0.447E-18	0.148E-16	0.347E-16	0.109E-16
19.00	0.300	0.362E-18	0.132E-16	0.328E-16	0.105E-16
19.00	0.350	0.287E-18	0.116E-16	0.309E-16	0.101E-16
19.00	0.400	0.223E-18	0.100E-16	0.289E-16	0.961E-17
19.00	0.450	0.169E-18	0.859E-17	0.268E-16	0.916E-17
19.00	0.500	0.124E-18	0.721E-17	0.247E-16	0.867E-17
19.00	0.550	0.868E-19	0.592E-17	0.225E-16	0.816E-17
19.00	0.600	0.580E-19	0.472E-17	0.203E-16	0.761E-17
19.00	0.620	0.484E-19	0.428E-17	0.193E-16	0.738E-17
19.00	0.640	0.400E-19	0.384E-17	0.184E-16	0.714E-17
19.00	0.660	0.326E-19	0.343E-17	0.175E-16	0.689E-17
19.00	0.680	0.262E-19	0.303E-17	0.165E-16	0.664E-17
19.00	0.700	0.206E-19	0.266E-17	0.155E-16	0.638E-17

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
20.00	0.000	0.775E-18	0.202E-16	0.402E-16	0.120E-16
20.00	0.050	0.666E-18	0.185E-16	0.386E-16	0.117E-16
20.00	0.100	0.568E-18	0.169E-16	0.370E-16	0.113E-16
20.00	0.150	0.478E-18	0.154E-16	0.353E-16	0.110E-16
20.00	0.200	0.398E-18	0.139E-16	0.337E-16	0.106E-16
20.00	0.250	0.326E-18	0.124E-16	0.319E-16	0.103E-16
20.00	0.300	0.263E-18	0.110E-16	0.302E-16	0.989E-17
20.00	0.350	0.208E-18	0.965E-17	0.283E-16	0.949E-17
20.00	0.400	0.161E-18	0.835E-17	0.265E-16	0.907E-17
20.00	0.450	0.121E-18	0.712E-17	0.246E-16	0.863E-17
20.00	0.500	0.876E-19	0.595E-17	0.226E-16	0.817E-17
20.00	0.550	0.611E-19	0.487E-17	0.206E-16	0.768E-17
20.00	0.600	0.404E-19	0.386E-17	0.185E-16	0.715E-17
20.00	0.620	0.336E-19	0.349E-17	0.176E-16	0.693E-17
20.00	0.640	0.277E-19	0.313E-17	0.167E-16	0.670E-17
20.00	0.660	0.224E-19	0.278E-17	0.158E-16	0.647E-17
20.00	0.680	0.179E-19	0.246E-17	0.150E-16	0.623E-17
20.00	0.700	0.141E-19	0.215E-17	0.140E-16	0.598E-17
22.00	0.000	0.439E-18	0.147E-16	0.346E-16	0.108E-16
22.00	0.050	0.376E-18	0.134E-16	0.331E-16	0.105E-16
22.00	0.100	0.318E-18	0.122E-16	0.317E-16	0.102E-16
22.00	0.150	0.266E-18	0.111E-16	0.302E-16	0.991E-17
22.00	0.200	0.219E-18	0.994E-17	0.288E-16	0.959E-17
22.00	0.250	0.178E-18	0.886E-17	0.272E-16	0.924E-17
22.00	0.300	0.142E-18	0.781E-17	0.257E-16	0.889E-17
22.00	0.350	0.112E-18	0.681E-17	0.241E-16	0.852E-17
22.00	0.400	0.852E-19	0.586E-17	0.224E-16	0.813E-17
22.00	0.450	0.633E-19	0.496E-17	0.207E-16	0.772E-17
22.00	0.500	0.453E-19	0.412E-17	0.190E-16	0.729E-17
22.00	0.550	0.311E-19	0.334E-17	0.172E-16	0.684E-17
22.00	0.600	0.202E-19	0.263E-17	0.154E-16	0.636E-17
22.00	0.620	0.167E-19	0.236E-17	0.147E-16	0.615E-17
22.00	0.640	0.136E-19	0.211E-17	0.139E-16	0.595E-17
22.00	0.660	0.110E-19	0.187E-17	0.132E-16	0.573E-17
22.00	0.680	0.866E-20	0.164E-17	0.124E-16	0.551E-17
22.00	0.700	0.673E-20	0.143E-17	0.116E-16	0.528E-17
24.00	0.000	0.256E-18	0.108E-16	0.300E-16	0.985E-17
24.00	0.050	0.218E-18	0.991E-17	0.287E-16	0.957E-17
24.00	0.100	0.183E-18	0.899E-17	0.274E-16	0.929E-17
24.00	0.150	0.152E-18	0.810E-17	0.261E-16	0.899E-17
24.00	0.200	0.125E-18	0.725E-17	0.248E-16	0.868E-17
24.00	0.250	0.101E-18	0.643E-17	0.234E-16	0.837E-17
24.00	0.300	0.796E-19	0.564E-17	0.220E-16	0.804E-17
24.00	0.350	0.617E-19	0.490E-17	0.206E-16	0.769E-17
24.00	0.400	0.467E-19	0.419E-17	0.192E-16	0.733E-17
24.00	0.450	0.343E-19	0.352E-17	0.177E-16	0.695E-17
24.00	0.500	0.242E-19	0.291E-17	0.162E-16	0.656E-17
24.00	0.550	0.164E-19	0.234E-17	0.146E-16	0.614E-17
24.00	0.600	0.105E-19	0.182E-17	0.130E-16	0.569E-17
24.00	0.620	0.859E-20	0.163E-17	0.124E-16	0.550E-17
24.00	0.640	0.695E-20	0.145E-17	0.117E-16	0.531E-17
24.00	0.660	0.554E-20	0.128E-17	0.111E-16	0.511E-17
24.00	0.680	0.434E-20	0.112E-17	0.104E-16	0.491E-17
24.00	0.700	0.334E-20	0.967E-18	0.971E-17	0.470E-17

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
26.00	0.000	0.153E-18	0.814E-17	0.262E-16	0.900E-17
26.00	0.050	0.130E-18	0.741E-17	0.250E-16	0.874E-17
26.00	0.100	0.108E-18	0.670E-17	0.239E-16	0.847E-17
26.00	0.150	0.894E-19	0.602E-17	0.227E-16	0.820E-17
26.00	0.200	0.727E-19	0.536E-17	0.215E-16	0.791E-17
26.00	0.250	0.582E-19	0.474E-17	0.203E-16	0.761E-17
26.00	0.300	0.457E-19	0.414E-17	0.191E-16	0.730E-17
26.00	0.350	0.351E-19	0.357E-17	0.178E-16	0.698E-17
26.00	0.400	0.263E-19	0.304E-17	0.165E-16	0.665E-17
26.00	0.450	0.191E-19	0.254E-17	0.152E-16	0.629E-17
26.00	0.500	0.133E-19	0.208E-17	0.139E-16	0.593E-17
26.00	0.550	0.890E-20	0.166E-17	0.125E-16	0.554E-17
26.00	0.600	0.559E-20	0.129E-17	0.111E-16	0.512E-17
26.00	0.620	0.455E-20	0.115E-17	0.105E-16	0.495E-17
26.00	0.640	0.366E-20	0.102E-17	0.994E-17	0.477E-17
26.00	0.660	0.289E-20	0.893E-18	0.936E-17	0.459E-17
26.00	0.680	0.224E-20	0.776E-18	0.878E-17	0.440E-17
26.00	0.700	0.171E-20	0.668E-18	0.819E-17	0.421E-17
28.00	0.000	0.938E-19	0.618E-17	0.230E-16	0.827E-17
28.00	0.050	0.789E-19	0.561E-17	0.220E-16	0.802E-17
28.00	0.100	0.655E-19	0.506E-17	0.209E-16	0.777E-17
28.00	0.150	0.537E-19	0.453E-17	0.199E-16	0.751E-17
28.00	0.200	0.434E-19	0.402E-17	0.188E-16	0.724E-17
28.00	0.250	0.345E-19	0.354E-17	0.177E-16	0.696E-17
28.00	0.300	0.269E-19	0.308E-17	0.166E-16	0.667E-17
28.00	0.350	0.205E-19	0.265E-17	0.155E-16	0.637E-17
28.00	0.400	0.152E-19	0.224E-17	0.143E-16	0.606E-17
28.00	0.450	0.109E-19	0.186E-17	0.132E-16	0.573E-17
28.00	0.500	0.753E-20	0.152E-17	0.120E-16	0.538E-17
28.00	0.550	0.495E-20	0.120E-17	0.107E-16	0.502E-17
28.00	0.600	0.307E-20	0.922E-18	0.951E-17	0.463E-17
28.00	0.620	0.248E-20	0.820E-18	0.900E-17	0.447E-17
28.00	0.640	0.197E-20	0.723E-18	0.850E-17	0.431E-17
28.00	0.660	0.155E-20	0.632E-18	0.799E-17	0.414E-17
28.00	0.680	0.119E-20	0.547E-18	0.748E-17	0.396E-17
28.00	0.700	0.899E-21	0.469E-18	0.697E-17	0.379E-17
30.00	0.000	0.585E-19	0.475E-17	0.203E-16	0.762E-17
30.00	0.050	0.489E-19	0.430E-17	0.194E-16	0.739E-17
30.00	0.100	0.404E-19	0.386E-17	0.185E-16	0.715E-17
30.00	0.150	0.329E-19	0.345E-17	0.175E-16	0.691E-17
30.00	0.200	0.264E-19	0.305E-17	0.165E-16	0.665E-17
30.00	0.250	0.209E-19	0.267E-17	0.155E-16	0.639E-17
30.00	0.300	0.161E-19	0.232E-17	0.145E-16	0.612E-17
30.00	0.350	0.122E-19	0.198E-17	0.135E-16	0.584E-17
30.00	0.400	0.895E-20	0.167E-17	0.125E-16	0.554E-17
30.00	0.450	0.636E-20	0.138E-17	0.115E-16	0.523E-17
30.00	0.500	0.434E-20	0.112E-17	0.104E-16	0.491E-17
30.00	0.550	0.282E-20	0.881E-18	0.931E-17	0.457E-17
30.00	0.600	0.172E-20	0.670E-18	0.821E-17	0.421E-17
30.00	0.620	0.138E-20	0.593E-18	0.776E-17	0.406E-17
30.00	0.640	0.109E-20	0.522E-18	0.732E-17	0.391E-17
30.00	0.660	0.850E-21	0.454E-18	0.687E-17	0.375E-17
30.00	0.680	0.649E-21	0.392E-18	0.642E-17	0.359E-17
30.00	0.700	0.485E-21	0.334E-18	0.596E-17	0.342E-17

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
32.00	0.000	0.371E-19	0.369E-17	0.181E-16	0.705E-17
32.00	0.050	0.309E-19	0.333E-17	0.172E-16	0.683E-17
32.00	0.100	0.254E-19	0.298E-17	0.164E-16	0.661E-17
32.00	0.150	0.206E-19	0.265E-17	0.155E-16	0.637E-17
32.00	0.200	0.164E-19	0.234E-17	0.146E-16	0.614E-17
32.00	0.250	0.129E-19	0.204E-17	0.137E-16	0.589E-17
32.00	0.300	0.986E-20	0.176E-17	0.128E-16	0.563E-17
32.00	0.350	0.739E-20	0.150E-17	0.119E-16	0.537E-17
32.00	0.400	0.538E-20	0.126E-17	0.110E-16	0.509E-17
32.00	0.450	0.378E-20	0.104E-17	0.100E-16	0.480E-17
32.00	0.500	0.255E-20	0.834E-18	0.908E-17	0.450E-17
32.00	0.550	0.164E-20	0.652E-18	0.811E-17	0.418E-17
32.00	0.600	0.984E-21	0.493E-18	0.713E-17	0.384E-17
32.00	0.620	0.785E-21	0.435E-18	0.673E-17	0.370E-17
32.00	0.640	0.617E-21	0.381E-18	0.634E-17	0.356E-17
32.00	0.660	0.477E-21	0.330E-18	0.594E-17	0.341E-17
32.00	0.680	0.361E-21	0.284E-18	0.554E-17	0.326E-17
32.00	0.700	0.268E-21	0.241E-18	0.514E-17	0.311E-17
34.00	0.000	0.239E-19	0.289E-17	0.161E-16	0.654E-17
34.00	0.050	0.198E-19	0.260E-17	0.153E-16	0.633E-17
34.00	0.100	0.162E-19	0.232E-17	0.146E-16	0.612E-17
34.00	0.150	0.130E-19	0.206E-17	0.138E-16	0.590E-17
34.00	0.200	0.103E-19	0.181E-17	0.130E-16	0.568E-17
34.00	0.250	0.805E-20	0.157E-17	0.122E-16	0.544E-17
34.00	0.300	0.613E-20	0.135E-17	0.113E-16	0.520E-17
34.00	0.350	0.456E-20	0.115E-17	0.105E-16	0.495E-17
34.00	0.400	0.329E-20	0.959E-18	0.968E-17	0.469E-17
34.00	0.450	0.229E-20	0.785E-18	0.883E-17	0.442E-17
34.00	0.500	0.153E-20	0.628E-18	0.797E-17	0.413E-17
34.00	0.550	0.970E-21	0.488E-18	0.710E-17	0.383E-17
34.00	0.600	0.575E-21	0.366E-18	0.622E-17	0.352E-17
34.00	0.620	0.455E-21	0.322E-18	0.587E-17	0.339E-17
34.00	0.640	0.355E-21	0.281E-18	0.552E-17	0.325E-17
34.00	0.660	0.273E-21	0.243E-18	0.516E-17	0.311E-17
34.00	0.680	0.205E-21	0.208E-18	0.481E-17	0.297E-17
34.00	0.700	0.151E-21	0.176E-18	0.445E-17	0.283E-17
36.00	0.000	0.157E-19	0.228E-17	0.144E-16	0.609E-17
36.00	0.050	0.129E-19	0.205E-17	0.137E-16	0.589E-17
36.00	0.100	0.105E-19	0.182E-17	0.130E-16	0.569E-17
36.00	0.150	0.840E-20	0.161E-17	0.123E-16	0.548E-17
36.00	0.200	0.662E-20	0.141E-17	0.116E-16	0.527E-17
36.00	0.250	0.512E-20	0.122E-17	0.108E-16	0.505E-17
36.00	0.300	0.387E-20	0.105E-17	0.101E-16	0.482E-17
36.00	0.350	0.286E-20	0.887E-18	0.934E-17	0.458E-17
36.00	0.400	0.204E-20	0.737E-18	0.857E-17	0.433E-17
36.00	0.450	0.141E-20	0.601E-18	0.781E-17	0.408E-17
36.00	0.500	0.932E-21	0.478E-18	0.703E-17	0.381E-17
36.00	0.550	0.584E-21	0.369E-18	0.625E-17	0.353E-17
36.00	0.600	0.341E-21	0.275E-18	0.546E-17	0.323E-17
36.00	0.620	0.269E-21	0.241E-18	0.514E-17	0.311E-17
36.00	0.640	0.208E-21	0.210E-18	0.483E-17	0.298E-17
36.00	0.660	0.159E-21	0.181E-18	0.451E-17	0.285E-17
36.00	0.680	0.118E-21	0.154E-18	0.419E-17	0.272E-17
36.00	0.700	0.863E-22	0.129E-18	0.387E-17	0.259E-17

IRAS Flux Look-up Table

R (AU)	Bond Albedo	Flux at 12 μm	Flux at 25 μm	Flux at 60 μm	Flux at 100 μm
38.00	0.000	0.104E-19	0.181E-17	0.130E-16	0.568E-17
38.00	0.050	0.850E-20	0.162E-17	0.123E-16	0.549E-17
38.00	0.100	0.688E-20	0.144E-17	0.117E-16	0.530E-17
38.00	0.150	0.548E-20	0.127E-17	0.110E-16	0.510E-17
38.00	0.200	0.429E-20	0.111E-17	0.104E-16	0.490E-17
38.00	0.250	0.330E-20	0.961E-18	0.969E-17	0.469E-17
38.00	0.300	0.248E-20	0.820E-18	0.901E-17	0.447E-17
38.00	0.350	0.181E-20	0.690E-18	0.832E-17	0.425E-17
38.00	0.400	0.129E-20	0.571E-18	0.763E-17	0.402E-17
38.00	0.450	0.881E-21	0.463E-18	0.693E-17	0.377E-17
38.00	0.500	0.576E-21	0.367E-18	0.623E-17	0.352E-17
38.00	0.550	0.357E-21	0.282E-18	0.552E-17	0.325E-17
38.00	0.600	0.206E-21	0.208E-18	0.481E-17	0.298E-17
38.00	0.620	0.161E-21	0.182E-18	0.452E-17	0.286E-17
38.00	0.640	0.124E-21	0.158E-18	0.424E-17	0.274E-17
38.00	0.660	0.939E-22	0.136E-18	0.396E-17	0.262E-17
38.00	0.680	0.696E-22	0.115E-18	0.367E-17	0.250E-17
38.00	0.700	0.503E-22	0.964E-19	0.339E-17	0.237E-17
40.00	0.000	0.695E-20	0.145E-17	0.117E-16	0.531E-17
40.00	0.050	0.567E-20	0.130E-17	0.111E-16	0.513E-17
40.00	0.100	0.456E-20	0.115E-17	0.105E-16	0.495E-17
40.00	0.150	0.362E-20	0.101E-17	0.992E-17	0.476E-17
40.00	0.200	0.282E-20	0.881E-18	0.931E-17	0.457E-17
40.00	0.250	0.215E-20	0.759E-18	0.869E-17	0.437E-17
40.00	0.300	0.161E-20	0.646E-18	0.807E-17	0.416E-17
40.00	0.350	0.117E-20	0.541E-18	0.744E-17	0.395E-17
40.00	0.400	0.823E-21	0.446E-18	0.681E-17	0.373E-17
40.00	0.450	0.558E-21	0.360E-18	0.618E-17	0.350E-17
40.00	0.500	0.361E-21	0.284E-18	0.554E-17	0.326E-17
40.00	0.550	0.221E-21	0.217E-18	0.490E-17	0.301E-17
40.00	0.600	0.126E-21	0.159E-18	0.425E-17	0.275E-17
40.00	0.620	0.980E-22	0.139E-18	0.400E-17	0.264E-17
40.00	0.640	0.750E-22	0.120E-18	0.374E-17	0.253E-17
40.00	0.660	0.564E-22	0.103E-18	0.349E-17	0.241E-17
40.00	0.680	0.415E-22	0.867E-19	0.323E-17	0.230E-17
40.00	0.700	0.298E-22	0.724E-19	0.298E-17	0.218E-17

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